

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 96

[OAR 2003-0053; FRL -]

RIN 2060 - AN57

Rule to Reduce Interstate Transport of Fine Particulate
Matter and Ozone (Clean Air Interstate Rule):
Reconsideration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Notice of Reconsideration.

SUMMARY: On May 12, 2005, EPA published in the Federal Register the final "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone" (Clean Air Interstate Rule or CAIR). The CAIR requires certain upwind States to reduce emissions of nitrogen oxides (NOx) and/or sulfur dioxide (SO2) that significantly contribute to nonattainment of, or interfere with maintenance by, downwind States with respect to the fine particle and/or 8-hour ozone national ambient air quality standards (NAAQS). Subsequently, EPA received 12 petitions for reconsideration of the final rule. On December 2, 2005, EPA published a notice of its decision to grant reconsideration of four issues raised in the petitions for reconsideration, and granted an additional opportunity for public comment. On December 29, 2005, EPA

published a notice of its decision to grant reconsideration of an additional issue raised by a petition for reconsideration, and again granted an additional opportunity for public comment. In this notice, EPA is announcing its final decisions on the five specific issues addressed in the December 2005 notices.

FOR FURTHER INFORMATION CONTACT: For general questions concerning today's action, please contact Carla Oldham, U.S. EPA, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, Mail Code C504-03, Research Triangle Park, NC 27711, phone number (919) 541-3347, e-mail address oldham.carla@epa.gov. For questions concerning the analyses described in section III of this notice, please contact Chitra Kumar, U.S. EPA, Office of Atmospheric Programs, Clean Air Markets Division, Mail Code 6204J, 1200 Pennsylvania Avenue, NW., Washington, DC, 20460, telephone (202) 343-9128, e-mail address kumar.chitra@epa.gov. For legal questions, please contact Sonja Rodman, U.S. EPA, Office of General Counsel, Mail Code 2344A, 1200 Pennsylvania Avenue, NW., Washington, DC, 20460, telephone 202-564-4079, e-mail address rodman.sonja@epa.gov.

SUPPLEMENTARY INFORMATION:

Does this Action Apply to Me? The CAIR does not directly

regulate emissions sources. Instead, it requires States to develop, adopt, and submit SIP revisions that would achieve the necessary SO₂ and NO_x emissions reductions, and leaves to the States the task of determining how to obtain those reductions, including which entities to regulate.

How Can I Get Copies of This Document and Other Related Information?

1. *Docket.* EPA has established a docket for action related to the CAIR under Docket ID No. EPA-HQ-OAR-2003-0053. All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute.

Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the EPA Docket Center (Air Docket), EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744.

2. *Electronic Access.* You may access this Federal

Register document electronically through the EPA Internet under the "Federal Register" listings at

<http://www.epa.gov/fedrgstr/>. In addition, the EPA has

established a website for the CAIR at

<http://www.epa.gov/cleanairinterstaterule> or more simply

<http://www.epa.gov/cair/>.

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I. Background

On May 12, 2005, the EPA (Agency or we) published the

final "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone" (Clean Air Interstate Rule or CAIR)(70 FR 25162). In this action, EPA found that 28 States and the District of Columbia contribute significantly to nonattainment of, and interfere with maintenance by, downwind States with respect to the NAAQS for fine particles (PM_{2.5}) and/or 8-hour ozone. The CAIR requires these upwind States to revise their State implementation plans (SIPs) to include control measures to reduce emissions of SO₂ and/or NO_x. Sulfur dioxide is a precursor to PM_{2.5} formation and NO_x is a precursor to PM_{2.5} and ozone formation. By reducing upwind emissions of SO₂ and NO_x, CAIR will assist downwind PM_{2.5} and 8-hour ozone nonattainment areas in achieving the NAAQS.

The CAIR implements the "good neighbor" provision of the Clean Air Act (CAA), section 110(a)(2)(D), which establishes State obligations to address interstate transport of pollution. The EPA conducted extensive air modeling to determine the extent to which emissions from certain upwind States were impacting downwind nonattainment areas. All States found to contribute significantly to downwind PM_{2.5} nonattainment and maintenance problems are included in the CAIR region for PM_{2.5} and are required to reduce annual emissions of SO₂ and NO_x. All States found to

contribute significantly to downwind 8-hour ozone nonattainment and maintenance problems are included in the CAIR region for ozone and are required to reduce NOx emissions during the 5-month ozone season (May-September). The CAIR establishes regional emission reduction requirements for annual SO2 and NOx emissions and seasonal NOx emissions. The reduction requirements are based on performance of control technologies which are known to be highly cost effective for reducing emissions of electric generating units (EGUs). The first phase of NOx reductions starts in 2009 (covering 2009-2014) and the first phase of SO2 reductions starts in 2010 (covering 2010-2014). The second phase of both SO2 and NOx reductions starts in 2015 (covering 2015 and thereafter).

Each State covered by CAIR may independently determine which emission sources to control, and which control measures to adopt. States that choose to base their programs on emissions reductions from EGUs may allow their EGUs to participate in an EPA-administered cap and trade program. The CAIR includes model rules for multi-State cap and trade programs for annual SO2 and NOx emissions, and seasonal NOx emissions. States may choose to adopt these rules to meet the required emissions reductions in a flexible and highly cost-effective manner. To learn more

about the CAIR and its impacts, the reader is encouraged to read the preamble to the CAIR (70 FR 25162; May 12, 2005).

The CAIR was promulgated through a process that involved significant public participation. The EPA published a notice of proposed rulemaking on January 30, 2004 (69 FR 4566) and a supplemental notice of supplemental proposed rulemaking on June 10, 2004 (69 FR 32684). The EPA also published a notice of data availability on August 6, 2004 (69 FR 47828). The Agency held public hearings on the January 2004 proposed rule on February 25 and 26, 2004, and an additional hearing on the supplemental proposal on June 3, 2004. In addition, the EPA received thousands of comments on the proposals. We responded to all significant public comments in the preamble to the final rule and in the final response to comments document available in the CAIR docket (Docket No. OAR-2003-0053-2172).

Following publication of the final rule, the Administrator received twelve petitions requesting reconsideration of certain aspects of the final CAIR. These petitions were filed pursuant to section 307(d)(7)(B) of the CAA. Under this provision, the Administrator is to initiate reconsideration proceedings if the petitioner shows that an objection is of central relevance to the rule and either that it was impracticable to raise the objection to the rule

within the public comment period, or that the grounds for the objection arose after the end of the public comment period but before the time for seeking judicial review had expired. The petitions for reconsideration of the CAIR asked EPA to reconsider several specific aspects of the final rule, and many of the petitions made similar requests.

By letters dated August 1, 2005, EPA granted reconsideration of the definition of "electric generating unit" or "EGU" as it relates to solid waste incinerators (and particularly municipal waste incinerators).¹ The EPA explained that the issue would be addressed in the proposed rule signed the same day. That proposed rule, entitled "Rulemaking on Section 126 Petition from North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program; Proposed Rule," was published on August 24, 2005 (70 FR 49708). In that proposal, EPA reconsidered the definition of "EGU" in the final CAIR as it relates to solid waste incinerators (70 FR at 49738). We proposed revisions to the definition of "EGU" and requested comment on that

¹ These letters are available in the CAIR Docket. (OAR-2003-0053-2209 and 2210).

issue.

On December 2, 2005, EPA published a notice of its decision to grant reconsideration of four additional issues presented in the petitions for reconsideration, and solicited public comment on those issues. On December 29, 2005, EPA published a notice of its decision to grant reconsideration of one additional issue raised by petition for reconsideration, and again solicited public comment on that issue. In those two notices EPA did not propose any modifications to the final CAIR, as we did not believe that any of the information that had been submitted demonstrated that EPA's final decisions in the CAIR rulemaking were erroneous or inappropriate.

The EPA requested comment only on the issues specifically described in Section III of each December 2005 notice. We did not reconsider or re-open for further comment any other provisions in the CAIR.

The EPA also received three limited requests to stay CAIR. The implementation of the CAIR in limited geographic areas pending resolution of this reconsideration process. One petitioner requested a stay of implementation of the CAIR in the State of Florida, and one petitioner requested a stay of implementation of the CAIR in the State of Minnesota, and one petitioner requested a stay of CAIR for a

limited subset of affected sources. By letter dated August 1, 2005, EPA declined to stay implementation of the CAIR in Florida.²

Finally, in addition to petitions for reconsideration, fourteen petitions for judicial review of the final rule were filed with the U.S. Court of Appeals for the District of Columbia.³ The fourteen cases have been consolidated into a single case, State of North Carolina v. EPA (No. 05-1244) (D.C. Cir). Many of the parties who petitioned EPA for reconsideration of the CAIR also petitioned for judicial review of the rule.

II. Today's Action

This notice addresses the five specific issues upon which we granted reconsideration and solicited comment in the December 2, 2005 and December 29, 2005 notices. Today's action is one of three actions EPA is taking today to

² This letter is also available in the CAIR Docket (OAR-2003-0053-2208).

³ State of North Carolina v. EPA (No. 05-1244); Minnesota Power v. EPA (No. 05-1246); ARIPPA v. EPA (No. 05-1249); South Carolina Public Service Authority et al. v. EPA (No. 05-1250); Entergy Corp. v. EPA (No. 05-1251); Florida Ass'n of Electric Utilities (No. 05-1252); FPL Group v. EPA (No. 05-1253); Northern Indiana Public Service Co. v. EPA (No. 05-1254); South Carolina Electric & Gas Co. v. EPA (No. 05-1256); Integrated Waste Services Ass'n v. EPA (No. 05-1257); AES Corp v. EPA (No. 05-1259); City of Amarillo, Texas et al. v. EPA (No. 05-1260); Appalachian Mountain Club et al. v. EPA (No. 05-1246); Duke Energy v. EPA (No. 05-1246).

resolve all remaining issues relating to the petitions for reconsideration of CAIR.

This notice takes action only with respect to the five issues identified in the December 2005 notices. In those notices, we announced our decision to grant reconsideration and solicited comments on the specific issues to be reconsidered. We did not, however, propose any changes to the CAIR or re-open for comment any other issues determined in the CAIR. In this action, we take final action on the five issues identified in the notices of reconsideration and respond to comments received during the reconsideration process. The first issue addressed in the December 2, 2005 notice relates to analyses done by EPA to address petitioner's claims regarding alleged inequities arising from the application of the SO₂ allowance allocation approach to be used by States choosing to participate in the EPA-administered SO₂ trading program. The second issue relates to EPA's use of specific fuel adjustment factors to establish NO_x budgets for each State. The third issue relates to modeling inputs used by EPA to determine whether emissions from Minnesota should be included in the CAIR region for PM_{2.5}. The fourth issue relates to EPA's determination that the State of Florida should be included

in the CAIR region for ozone. The issue raised in the December 29, 2005 notice relates to the potential impact of a recent judicial opinion, New York v. EPA, 413 F.3d 3 (D.C. Cir. 2005), certain analyses done for the CAIR relating to the identification of highly cost-effective controls and the timing of CAIR deadlines. New York v. EPA, 413 F.3d 3 (D.C. Cir. 2005) was decided on June 24, 2005 -- after the final CAIR was published but before the time for judicial review of the rule had run. Each issue is described in greater detail in Section III of this notice.

EPA also is taking two additional actions relating to the petitions for reconsideration of CAIR. First, EPA is sending nine separate letters to the petitioners with outstanding requests for reconsideration. These letters address their requests that EPA reconsider the following ten issues: (1) the 0.2ug/m³ threshold used to determine if a state's emissions contribute significantly to PM_{2.5} nonattainment and maintenance problems in downwind states (multiple requests for reconsideration arguing both that the threshold is too high and that it is too low); (2) the inclusion of the full state of Florida in the CAIR region for PM_{2.5} (two requests for reconsideration challenging EPA's decision to determine significant contribution on a statewide basis); (3) the inclusion of the full state of

Texas in the CAIR region for PM2.5 (two requests for reconsideration challenging EPA's decision to determine significant contribution on a statewide basis); (4) the NOx budget allocated to the State of Connecticut (two requests for reconsideration); (5) the treatment of previously allocated 2009 NOx Budget Trading Program allowances; (6) the SO2 retirement ratio for Title IV allowances as applied to units that receive, through 2009, "bonus" allocations under section 405(a)(2) of the Clean Air Act; (7) the phase I NOx compliance date of 2009; (8) EPA's interpretation of the "interfere with maintenance" prong of section 110 of the Clean Air Act; (9) the method used to identify downwind nonattainment areas; and (10) the creation of a compliance supplement pool for the annual NOx trading program.

Finally, the petitions for reconsideration contain two outstanding requests to stay CAIR: one asking for CAIR to be stayed in the state of Minnesota and one asking that CAIR be stayed only for the subset of sources that has either already received 2009 NOx Budget Trading Program allowances or is currently receiving "bonus" allowances under section 405(a)(2) of Title IV of the Clean Air Act.

EPA has carefully considered each of these requests for reconsideration. We have concluded that reconsideration of these issues is not warranted under section 307(d)(7)(B) of

the Clean Air Act. EPA is therefore denying all remaining requests for reconsideration. In addition, EPA is denying the remaining requests to stay CAIR. These decisions are fully explained in the letters to petitioners which are available in the CAIR docket (EPA-HQ-OAR-2005-0053).

In a separate action signed today, EPA is taking final action on the request for reconsideration discussed in the August 1, 2005 Federal Register notice. This action is taken as part of our final action responding to North Carolina's section 126 petition and promulgating Federal implementation plans for all states in the CAIR regions. In that action, we also take final action on the request reconsider EPA's treatment in CAIR of solid waste incinerators (particularly municipal waste combustors), and finalize the revisions to the definition of "EGU" proposed in response to that request. This action, titled "Rulemaking on Section 126 Petition from North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program,"⁴ will be published shortly in the Federal

⁴ See www.regulations.gov, Docket ID No. EPA-HQ-OAR-2003-0053.

Register.

III. Discussion of Issues

A. SO₂ Allowance Allocation (& State Budget) Approach in the CAIR Model Trading Rules

As noted above, EPA decided to grant reconsideration on six issues related to the final CAIR. The first of these issues relates to the SO₂ allocation approach in the CAIR model rules. EPA received one petition for reconsideration that asked EPA to reconsider the SO₂ allocation approach to be used by States participating in the EPA-administered CAIR SO₂ trading program. This petitioner argued that the SO₂ allowance allocation approach is unreasonable and inequitable. The petitioner argued that the approach is unreasonable because other approaches would be more appropriate. According to the petitioner, the approach is inequitable because it results in owners of units that have historically lower emission rates being forced to buy allowances from historically higher emitting units that install new emission controls. The petitioner asked EPA to establish a different approach. As described in the Notice of Reconsideration, EPA does not agree with petitioner's conclusions about this issue. EPA continues to believe that the approach selected is reasonable for the reasons

explained in the CAIR final rule and further discussed below. Furthermore, numerous opportunities for public comment on this issue were provided, and a full discussion of the allowance allocation options occurred during the rule development process. Nonetheless, given the intense public interest in this issue, EPA decided to grant the petition for reconsideration insofar as it raised issues regarding alleged inequities resulting from the application of EPA's SO2 allowance allocation approach.

In the Notice of Reconsideration, EPA announced its decision to reconsider this issue and solicited additional public input. EPA also solicited comment on additional analyses it conducted in response to the petition for reconsideration concerning the impact of the SO2 allowance allocation approach adopted in the CAIR model trading rule.

This additional analysis compared the SO2 allocation approach in CAIR to various alternatives EPA also considered during the rulemaking process. In response to comment on the Notice of Reconsideration, EPA has further refined some of its analyses and carefully considered the arguments of the petitioner. EPA continues to believe that these analyses show that EPA's selected approach to SO2 allowance allocations is appropriate, given the objectives of CAIR and other relevant considerations. Moreover, EPA believes that

the Agency's approach produces a reasonable result in terms of equity. Therefore, in this Notice of Final Action on Reconsideration, EPA is not altering the approach taken in CAIR for SO₂ allowance allocation. EPA's response to public comments on the analyses presented in the Notice of Reconsideration and further discussion of the petitioner's concerns are provided below (and in the Technical Support Document, "CAIR SO₂ Allocation Approach Analysis" and the Response to Comments).

Considerations Relevant to Choosing an Allocation Approach

While EPA did not explicitly define a distinct set of principles that should be used in developing State budgets under a region-wide cap and trade program, EPA has made it clear throughout this process that it has relied upon several consistent, important factors in developing both the SO₂ and NO_x budgets.

The first is the impact of allowance allocations on the specific environmental objectives and overall cost of the rule, as well as any potential adverse effects. In general, while the chosen allocation or State budget calculation approach can affect the distribution of compliance costs under a cap-and-trade program, it will have little effect on overall compliance costs or environmental outcome. This is because the incentives provided by cap-and-trade encourage

economically efficient compliance over the entire region. However, this may not always hold where there are interactions with existing environmental policies. In the case of NO_x, EPA did not find this consideration to be restrictive because there was not an existing annual NO_x trading program and the SIP Call ozone season trading program could be easily integrated into the CAIR ozone season trading program. As a result, a number of budget methodologies were compatible. For SO₂, this consideration played a larger role because depending upon how the program was integrated within the existing Title IV structure, it could impact emissions before the program went into affect as well as emissions in regions not affected by the program.

Another important consideration is that an allocation methodology must be consistent with the existing regulatory and legislative structure. Once again for NO_x, this consideration could be satisfied with a wide range of budget methodologies. However, for SO₂, reductions for EGUs using Title IV allowances is necessary in order to ensure the preservation of a viable Title IV program (70 FR 72272). Linking the two programs maintains the trust and confidence that has developed in the functioning market for title IV allowances. The EPA recognizes this familiarity and confidence (especially in a market-based approach) as a key

source of the program's success.

A third factor is equity. In the absence of other considerations, EPA believes that it is in the public interest that the distribution of allowances under a cap and trade program be as equitable as possible. For NO_x, since the other considerations could be satisfied with a number of different methodologies, this factor was the primary one. For SO₂, where the other considerations were more limiting, this factor was not as central to our decisions, especially since the Title IV allocation structure was erected by Congress for the long term.

Title IV and CAIR

The CAIR model SO₂ trading program relies on the use of title IV SO₂ allowances for compliance with the allowance-holding requirements of CAIR. Title IV SO₂ allowances have already been allocated on a unit-by-unit basis in perpetuity, based on formulas set forth in sections 405 and 406 of the Clean Air Act (CAA), which EPA implemented through final regulations issued in 1998 (See 42 U.S.C. 7651d and 7651e; and 18 CFR 73.10(b)). The statutory formulas for allocation of title IV SO₂ allowances were based on unit data for 1985-1987 and, for some units, data for years up to 1995. For the title IV SO₂ trading program, each allowance authorizes one ton of SO₂ emissions.

For the CAIR SO₂ trading program, SO₂ reductions will be achieved by generally requiring CAIR sources to retire more than one title IV allowance of 2010 and later vintages for each ton of SO₂ emissions in 2010 and thereafter. Specifically, each title IV SO₂ allowance issued for 2009 or earlier will be used for compliance by CAIR sources at a ratio of one allowance per ton of SO₂ emissions and would authorize one ton of SO₂ emissions. Each title IV allowance of vintage 2010 through 2014 will be used for compliance under CAIR at a two-to-one ratio and authorize 0.5 tons of SO₂ emissions. Each title IV allowance of vintage 2015 and later will be used at a 2.86-to-1 ratio and authorize 0.35 tons of SO₂ emissions. See discussion in the preamble to the final CAIR in section VII (70 FR 25255-25273) and section IX (70 FR 25290-25291).

Response to Comments on EPA's Statutory Authority

Several commenters expressed support of EPA's chosen allocation approach, arguing that EPA was entirely within its legal authority to use title IV allowances to implement the SO₂ trading program under CAIR. These commenters generally argued that EPA's use of title IV allowances to implement CAIR reductions was necessary to maintain the viability of the program and continued confidence in cap-and-trade programs.

A few commenters on the Notice of Reconsideration assert that EPA has exceeded its statutory authority under title IV of the CAA by tying CAIR SO₂ allocations to title IV allowances. In addition, a few commenters argue that EPA's final CAIR SO₂ allocation approach unlawfully limits States' discretion under section 110 of the CAA to determine how to meet their "good neighbor" obligations and to meet national ambient air quality standards. These same concerns were also raised during the CAIR rulemaking process and EPA provided a detailed justification for its use of title IV allowances under CAIR, including direct responses to these comments in the CAIR preamble (70 FR 25290-96). EPA maintains that its approach of using title IV allowances in the CAIR SO₂ trading program and imposing an allowance-retirement requirement on States that do not adopt the CAIR SO₂ trading program is within its statutory authority and is a reasonable exercise of that authority. Additionally, there is nothing in section 110 of the CAA that would bar the use of title IV allowances to accomplish attainment goals under 110(a)(2)(d).

One commenter suggests that EPA's SO₂ allocation approach using title IV allowances is in violation of CAA section 110(a)(2)(d) because it distributes allowances among States in a way that would effectively result in different

emissions rates among States, and different resulting control costs. The commenter argues for an approach that results in an equal effective emissions rate across States. The commenter then cites section 102(a) of the CAA, arguing that the provision "directs EPA to promote the development of air pollution control laws at the state and local level that are as 'uniform' from jurisdiction to jurisdiction as practicable." The commenter then proceeds to argue that EPA's use of title IV allowance allocations for SO₂ allowance allocations under CAIR violates this notion of parity without reason and is therefore unlawful.

EPA disagrees with the commenter's interpretation of these two CAA provisions. First, nothing in section 110(a)(2)(d) indicates how EPA should allocate allowances under a cap-and-trade program. Second, while the commenter suggests that an allocation approach that results in a uniform effective emissions rate across all States would remedy the inequities the commenter perceives in EPA's application of 110(a)(2)(d), the allocation approach that the commenter actually recommends does not result in this outcome. Third, section 102(a) of the CAA indicates that "The Administrator shall...encourage the enactment of improved and, so far as practicable in the light of varying conditions and needs, uniform State and local laws relating

to the prevention and control of air pollution". As is discussed throughout this section of the CAIR Notice of Final Action on Reconsideration, the existence of title IV creates a set of conditions under which it is not "practicable" to create a new set of allowance allocations for SO₂ for the purposes of CAIR. Finally, the use of the phrase "The Administrator shall encourage" in section 102(a) indicates that this provision is in no way a directive that requires the Agency to obtain any specific result during its rulemakings. Finally, the use of a cap-and-trade program assures that the marginal cost paid for a ton of emission reduction should be close to the observed allowance price, assuring a uniform marginal cost from State to State.

SO₂ Allocation Options Discussed in CAIR

EPA considered and analyzed a variety of SO₂ allowance allocation methodologies during the CAIR rulemaking process.

After careful analysis, EPA decided to use the allocation approach chosen by Congress in title IV of the Clean Air Act. EPA also considered the following alternative approaches, which are explained in the final CAIR "Corrected Response to Significant Public Comments on the Proposed Clean Air Interstate Rule," Corrected April 2005 (Docket Number OAR-2003-0053):

- Allocations based on historic tons of actual

emissions from more recent years;

- Allocations based on heat input (with alternatives based on heat input from all fossil generation, and heat input from coal- and oil-fired generation only); and
- Allocations based on electricity output (with alternatives based on all generation and all fossil-fired generation).

In addition to these alternatives, EPA has analyzed other heat input-based allocation approaches in the reconsideration process, explained below. Each allocation approach suggested by the petitioner and other commenters during the CAIR rulemaking and reconsideration process has advantages and disadvantages for different companies and States. However, as explained in the final CAIR, EPA believes that the approach used in the final CAIR is the most appropriate among the alternatives for several reasons.

First, EPA believes - based on strong policy and air quality concerns - that it is necessary to use the existing title IV allowances in order to preserve the viability and emissions reductions of the highly successful title IV program. The disruption of the title IV SO₂ trading program would also potentially result in increased emissions outside

of the CAIR region starting in 2010 because, with title IV allowances having little or no value, the title IV program would no longer constrain SO₂ emissions in those States. Further, if title IV allowances are not used for compliance in the CAIR SO₂ trading program, the likely result will be: a significant surplus of title IV allowances; a collapse of the price of title IV allowances; and a title IV SO₂ trading program that, contrary to Congressional intent, no longer provides incentives to minimize emissions control costs and encourage pollution prevention and innovation.

If EPA adopts an approach that does not preserve the structure of the title IV allowance market and the value of those allowances, the confidence in the cap-and-trade policy instrument and allowance markets in general, and in the CAIR cap-and-trade programs in particular, would likely decline.

Such an outcome could result in a reduced willingness of the owners of sources in cap-and-trade programs to invest in control technologies that would generate excess allowances for sale, or to purchase allowances for compliance, for fear that the rules might change. If owners were to ignore the incentives provided by cap-and-trade in such a manner, efficiency and cost-savings provided by these programs would be lost. The preservation of title IV allowances for use in CAIR, then, is integral to the viability and effectiveness

of both title IV and the CAIR trading programs. See discussion in preamble to the final CAIR in section IX (70 FR 25293-25295).

Second, EPA relied on the permanent allocation methodology established by Congress in title IV for purposes of reducing SO₂ emissions. Congress chose a policy of not revisiting and revising these allocations and, apparently, believed that its allocation methodology for title IV allowances would be appropriate for future time periods.

Third, title IV allowance allocations provide a logical and well understood starting point from which additional electric generation unit (EGU) SO₂ emission reductions can be achieved for Acid Rain units, which account for over 90 percent of the SO₂ emissions from CAIR EGUs.

Finally, in response to comments on the proposed CAIR, EPA performed an analysis comparing the title IV methodology to other methodologies. At the outset, EPA notes that the objective of CAIR is not to ensure that each State receives the maximum amount of SO₂ allowances possible under any approach. The goal of CAIR is to achieve the SO₂ emissions reductions through the region-wide budgets. As EPA has noted, selecting the most appropriate SO₂ allowance allocation approach for CAIR has required addressing a number of different considerations. The policy and air

quality concerns specific to the CAIR SO₂ trading program and noted by EPA above necessitate that EPA implement the CAIR SO₂ program using the existing structure of title IV. Nevertheless, EPA has analyzed the impact of using title IV allocations on States relative to other possible allocation approaches, and found that this approach produces a reasonable result (See CAIR Corrected Response to Comments, section X.A.26, Docket #: EPA-HQ-OAR-2003-0053-2172, and "CAIR SO₂ Allocation Approach Analysis" Technical Support Document available in the docket).

In summary, EPA's use of title IV allowances in the CAIR SO₂ trading program is supported by: (1) EPA's determination that this approach is necessary to maintain the efficacy of the title IV program and to prevent erosion of confidence in cap-and-trade programs in general; and (2) EPA's analysis showing that the allocations resulting from this approach are reasonable. Nevertheless, as a part of this reconsideration, EPA performed additional analyses, explained below, to evaluate the SO₂ allocation approach in the final CAIR in light of the petitioner's concerns.

Equitability of CAIR SO₂ Allocation Approach

While the petitioner stated that the CAIR final allocation approach is "inequitable" because lower emitting units would buy allowances from higher emitting units that

install emission controls, it is unclear why such a result would actually be inequitable. On the contrary, the owner of each of the units involved would be choosing to adopt the most economic compliance strategy in light of the unit's emission control costs and the market value of allowances. The ability of the owners to make such choices reflects the flexibility, inherent cost-effectiveness, and promotion of least-cost compliance for all program participants provided by a cap-and-trade program.

Response to Comments on the Equitability of CAIR SO₂

Allocation Approach

One commenter argued that EPA should use the same metrics and methodologies used to evaluate NO_x allowance allocation approaches to evaluate SO₂ allowance allocation approaches. The commenter suggests that the metrics by which EPA assessed NO_x allocations included (1) whether the EPA method avoids penalizing coal-fired generation units that already have installed emissions controls and (2) whether, relative to the alternative allocation approaches, the EPA method better minimizes for each State the disparity between allowances provided and projected emissions, and argued that EPA cites these rationales in justifying its chosen NO_x allocation approach. This commenter also suggests that EPA's use of title IV allowances penalizes new

units and independent power producers (IPPs) and results in large wealth transfers from low-emitting to high-emitting States.

While EPA agrees that the Agency considered these factors (among several others) in choosing its allocation approach under the CAIR NOx trading programs, EPA does not fully agree with the commenter's characterization of EPA's considerations. EPA believes that the commenter has omitted some of the significant context and caveats that were included in the discussion of NOx allocations and the use of fuel adjustment factors in the reconsideration notice, as well as a number of other factors that EPA must consider, particularly in the context of SO2 allocations. First, EPA noted in the June 10, 2004 Supplemental Notice of Proposed Rulemaking and in the Notice of Reconsideration that, "in contrast to *allocations based on historic emissions*, the factors would also not penalize coal-fired plants that have already installed pollution controls" (69 FR 32869, 70 FR 72276, emphasis added). This language explains that NOx allocations using historic heat input adjusted for fuel type, while providing additional allowances to coal-fired units that will likely install controls under CAIR, would not simultaneously penalize coal-fired units that had already made investments in emissions controls. An approach

based on historic emissions, on the other hand, would also provide additional allowances to units that would likely have to install controls, but would simultaneously penalize units that had already done so. While EPA makes this argument in support of its chosen approach for NOx allocations, the Agency does not raise this point to establish a criterion for evaluating allowance allocation approaches. Rather, it simply notes that its chosen approach for NOx allocations can provide an advantage to one set of coal-fired units without disadvantaging another set of coal-fired units.

Second, while the commenter is correct in noting that EPA stated in its discussion of NOx allocations in the Notice of Reconsideration that it is in the public interest to attempt to minimize the disparity between individual State budgets and projected emissions for each State, EPA did not set this goal as one of only two primary criteria for adoption of a given allocation strategy, as the commenter suggests. Rather, EPA notes that "*In the absence of other considerations*, EPA believes that it is in the public interest to reduce the disparity between the number of allowances in a State budget and total projected State EGU emissions" (70 FR 72276, emphasis added). As EPA has noted, the Agency had to weigh many considerations in

choosing an SO₂ allowance allocation approach. In particular, unlike in the case of NO_x, EPA had to consider an existing, nationwide trading program implemented by statute in the case of SO₂.

Third, as EPA discussed in the CAIR Response to Comments, while commenters express concern about the availability of allowances for non-Acid Rain units, it should be noted that not all sources covered under the Acid Rain program received allowances. By the design of the title IV program (as outlined by Congress), because of the permanent allocation of allowances, new units beginning commercial operation after 1995 or beginning construction after 1990 did not receive title IV allowances. Thus, Congress recognized that, over time, new units would be built and covered under the program, but felt it reasonable that such units would obtain title IV allowances either through the auction or from the market. Under the auction, 250,000 title IV allowances are be auctioned annually (half for the current compliance year and half for the compliance year seven years in advance), and these allowances can be used for compliance with CAIR. The availability of these allowances ensures that all sources, including new units and non-title IV sources, will have access to a pool of allowances. Finally, IPPs have the option of opting in to

title IV until their exemption expires in order to obtain title IV allowances. EPA addresses other issues specific to IPPs in section VI.E of today's CAIR FIP Notice of Final Rulemaking preamble.

Fourth, while the commenter asserts that EPA's use of title IV allowances in the CAIR SO₂ trading program will result in significant wealth transfers from low-emitting to high-emitting States, EPA's analysis of SO₂ coverage ratios (the ratio of allowances to projected emissions, discussed to some degree in this section and presented in the "CAIR SO₂ Allocation Approach Analysis" Technical Support Document, available in the docket), is not suggestive of this trend. In fact, looking at the differences in States' projected emissions and coverage ratios between the base case and CAIR, it becomes evident that both lower- and higher-emitting States are projected to make investments in emissions controls under CAIR, reducing their demand for allowances, or freeing up allowances for sale, in the process. States that might be categorized as high-emitting are not always projected to be net sellers of allowances, and States that might be categorized as low-emitting are not always projected to be net purchasers of allowances.

Another commenter argues that smaller units would be forced to purchase SO₂ allowances from the market in order

to comply with CAIR. This commenter argues that the SO₂ allowance market is not efficient and subjects some participants to endure an undue amount of financial burden and/or risk. EPA believes that the commenter's claims about the state of the SO₂ allowance market are unfounded. As is discussed in the Acid Rain Program Report (EPA 43-R-05-012, October 2005), about 20,000 allowance transactions, affecting about 15.3 million allowances were recorded in the EPA Allowance Tracking System in 2004. In addition, title IV compliance costs have been much lower than projected and allowance prices in the SO₂ allowance market have generally reflected this. Finally, as discussed earlier in this section, sources have the option of purchasing allowances directly from the annual auction.

Further, in raising equity concerns, a couple of commenters argue for conflicting measures of equity within their own comments. These commenters argue that an equitable emissions allocation approach will result in an equivalent effective emissions rate across States. These commenters then point to EPA's chosen CAIR NO_x emissions allocation approach as an exemplary allocation approach because it limits the disparity between individual State budgets and projected emissions. However, the commenters fail to realize that EPA's NO_x allocations approach does not

actually result in an equivalent emissions rate across States. In other words, choosing a CAIR SO₂ allocation approach with the goal of minimizing the disparities between State budgets and projected emissions would result in the selection of a different approach than would the goal of equating effective emissions rates across States.

Finally, some commenters argued that the use of title IV allowance allocations penalizes sources who have already installed scrubbers prior to the start of the Acid Rain Program. This is because, in general, allowances under title IV were allocated to units that had not installed controls at a higher rate relative to units that had installed controls. The title IV approach, in that sense, is somewhat similar to the approach taken for NO_x under CAIR, in that it provides additional allowances for units expected to install controls under the rule. EPA believes that the commenters' arguments that the continued use of title IV allowances penalizes sources that installed controls prior to the Acid Rain Program are unfounded. First, these controls were installed over 20 years ago and were completed within a regulated electricity sector, such that in most cases the cost of installing these controls should have been recovered through electricity price rate increases. Second, these controls were installed in

response to requirements separate from both CAIR and the Acid Rain Program. Third, Congress was clearly aware of the issues raised by commenters when designing the SO₂ trading program in 1990, and consciously used a formula for future allocations for the length of time it believed was reasonable. In general, the Acid Rain Program has enjoyed 10 years of operation without substantial concern over this issue and with industry at-large appreciating the program's merits in providing a cost-effective, flexible, and balanced way to provide environmental protection. Finally, analysis by one of these two commenters, which estimates the windfall of allowances that a hypothetical unscrubbed coal-fired unit would attain by installing a scrubber and reducing emissions, neglects the fact that this unit would have to bear the costs of installing controls. Thus, the ostensible windfall would be significantly smaller than was suggested by the commenter.

Analysis of SO₂ Allocation Options Presented in the Notice of Reconsideration

In the Notice of Reconsideration, EPA compared three alternative SO₂ allowance allocation methodologies to the approach in the final CAIR. In these analyses, EPA examined how allowances would be distributed to individual companies instead of examining how they would be distributed to

States. According to the petitioner, the allowance distribution will result in the petitioner's relatively low-emitting units being forced to buy allowances from other companies' relatively high-emitting units. The petitioner thus argues the allocation approach used in CAIR is per se inequitable and unreasonable. To evaluate this concern, EPA compared projected allocations not just to individual units, but to individual parent and operating companies who own these units under various methodologies relative to projected SO₂ emissions of all the units owned by those companies. Figures and tables from the analysis presented in the Notice of Reconsideration can be found in the docket, EPA-HQ-OAR-2003-0053, "SO₂ Allowance Allocation Methodology Comparative Analysis Data Files").

The three alternative allowance allocation methodologies EPA analyzed were suggested by various commenters during the rulemaking process and this reconsideration process. These methodologies are:

- Allocating allowances based on more recent heat input data;
- Allocating allowances based on more recent heat input data adjusted for fuel type (e.g., coal, oil and gas); and
- Allocating allowances based on more recent heat

input data adjusted both for fuel type and for coal type (e.g., bituminous, sub-bituminous and lignite).

In comparing the CAIR SO₂ allocation approach and the three alternative methodologies, EPA took into account certain factors that are applicable to the CAIR final allocation approach but not to the three alternative methodologies. For all four methodologies, EPA analyzed the resulting total allowance allocations, and the total projected emissions, for companies' sources located in the States subject to CAIR. In addition, for all the methodologies, EPA analyzed the relationship between allowances and emissions in two ways. First, EPA calculated the ratio of allowances to total projected emissions before CAIR controls (base case emissions). This provides a reasonable estimate of the extent to which each company's future emissions will exceed its allowances and, thus, indicates how much effort a company must expend for compliance either by purchasing allowances or installing controls. Second, EPA calculated the ratio of allowances to total projected emissions after the installation of CAIR controls (control case emissions). This provides a reasonable estimate of the number of allowances a company would need to purchase or would be able to sell after any

controls are installed. Some companies with low-emitting units may have excess allowances to sell even if no controls are installed.

In its analysis of the CAIR approach, EPA also considered both the allowance allocations and the emissions for companies' units both within the CAIR region and outside the CAIR region. EPA believes that this is appropriate because, under the CAIR approach, if a company's units outside the CAIR region have more title IV allowances than needed to cover their emissions under the Acid Rain Program, the company might be able to transfer, at little or no net cost, excess allowances to the company's units in the CAIR region for use to cover emissions under the CAIR trading program. Under the three alternative methodologies, all of which would require creating new CAIR SO₂ allowances independent of the existing title IV allocations, CAIR sources could not use title IV allowances held for sources outside (or inside) the CAIR region for compliance with the CAIR SO₂ allowance holding requirement.

Further, in the analysis of the CAIR approach, EPA considered the allocation of title IV allowances to CAIR units that are not currently in the Acid Rain Program but that could opt in to the Acid Rain Program and receive title IV allowances (see 42 U.S.C. 7651i and 18 CFR part 74 and

the discussion below concerning the ability of units to opt in). This analysis assumed that companies owning non-Acid Rain units subject to CAIR would elect to opt in to the Acid Rain Program because they would receive title IV allowances to cover a portion of the units' emissions under CAIR. EPA believes this assumption is reasonable because any of these units has the option of becoming an Acid Rain Program opt-in unit and thereby providing the company additional allowances at little or no additional cost, and the value of title IV allowances could be substantial. In contrast, the analysis of the three alternative methodologies did not consider the impact of Acid Rain Program opt-ins because these approaches do not use title IV allowances for CAIR compliance.

EPA's analysis indicated that while allocations vary from company to company under the four methodologies, overall the distributions of allowances that companies received relative to their projected emissions for the CAIR control case are very similar. EPA came to similar conclusions when looking at the base case.

Response to Comments on EPA's analysis

EPA received several comments on various aspects of the SO₂ allocation analyses presented in the Notice of Reconsideration. A few commenters claimed that EPA should have focused its analyses on State budgets rather than on

projected allocations to companies because, with an alternative allocation approach, States would have the responsibility for allocating allowances to their respective affected sources and could meet control requirements differently than assumed in EPA's analyses. Further, these commenters claimed a State-by-State analysis is more consistent with the analysis of NOx allocation methodologies in the Notice of Reconsideration and the final CAIR itself.

Finally, one commenter noted that company-specific analysis can obscure state-by-state variation and may not be reliable given continual shifts in ownership structure.

EPA agrees with the commenters that one method of evaluating the reasonableness of SO2 allocation approaches is (in addition to company-by-company analyses) to compare State budgets calculated according to various methodologies. Despite one commenter's assertion that company-level analysis is made unreliable by constantly changing corporate structures, EPA believes that such an analysis remains instructive. A State-level analysis provides additional perspective on the impact of various allocation approaches, though it will, of course, obscure some of the potential company-level variability among allowance approaches.

EPA presented such a State-by-State analysis in the final CAIR RTC (final CAIR "Corrected Response to

Significant Public Comments on the Proposed Clean Air Interstate Rule," Corrected April 2005 (Docket Number OAR-2003-0053)). EPA recognizes that the analysis prepared for the CAIR RTC did not consider two of the alternative allocation approaches discussed above. For today's notice, EPA has analyzed State budgets calculated under eight different approaches (title IV and seven alternatives). These eight approaches are described in Table IIIA.1, below.

Table III.A.1. Description of Allocation Approaches

Included in EPA Analysis

Approach Name	Description of Approach
EPA Title IV	Title IV allocations adjusted for the 2 to 1 allowance retirement ratio in 2010-2014 and the 2.86 to 1 allowance retirement ratio in 2015 and thereafter. EPA's chosen approach.
Average 1999 -2002 (Pure) Heat Input	For each State, calculates the average heat input over the years 1999-2002. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average for those years.
1999 -2002 Heat Input w/ Fuel Factors	For each State, calculates the average adjusted heat input over the years 1999-2002. Adjusts heat input using factors of 1.0 for coal, 0.009 for natural gas, and 0.3 for oil. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average adjusted heat input for those years.
1999 -2002 Heat Input w/ Fuel	For each State, calculates the average adjusted heat input over the years 1999-

Factors & Coal Type	2002. Adjusts heat input using factors of 2.6 for bituminous coal, 1.0 for subbituminous and lignite coals, 0.2 for natural gas, and 0.7 for oil. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average adjusted heat input for those years.
Average 1999 -2002 Heat Input Coal + Oil	For each State, calculates the average heat input from coal- and oil-fired units over the years 1999-2002. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average heat input from these units for those years.
Average 1999 -2002 SO2 Emissions	For each State, calculates the average emissions over the years 1999-2002. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average emissions for those years.
Average 1999 -2002 Generation Output (all sources fossil and non-fossil)	For each State, calculates the average output over the years 1999-2002. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average output for those years.
1999 -2002 Generation Output (Fossil-fuel-fired units only)	For each State, calculates the average output from fossil fuel-fired units over the years 1999-2002. Apportions the region-wide SO2 cap to individual States based on each State's share of the total region-wide average output from these units for those years.

As is shown in Table III.A.2, the first component of EPA's State-level analysis compared the individual State shares of total region-wide SO2 allocations under the

various approaches. (See "Sulfur Dioxide Allowance Allocation Methodology Comparative Analysis" Technical Support Document (Docket ID: EPA-HQ-OAR-2003-0053)). The revised analysis is consistent with EPA's original findings.

As can be seen from Table III.A.2, 80 percent of States get neither the most nor the least allowances relative to what they receive under the other allocation approaches, under the title IV approach. Furthermore, when compared specifically to the methods supported by commenters (pure heat input, heat input with fuel factors, heat input with fuel factors and coal type, coal and oil heat input and average output all), distribution of State budgets using title IV allocations results in an individual State receiving its smallest or greatest share of total SO₂ allocations relative to what the individual State receives under the alternative approaches the same number of times as the pure heat input methodology and fewer times than the other methodologies supported by commenters (see the last three rows of Table III.A.2). Such results support EPA's argument that its chosen allocation approach is reasonable.

While the coal and oil heat input approach appears to perform best in this analysis, this approach received more limited commenter support.

In examining the results of this analysis for the

States where commenters that submitted adverse comments on the use of title IV own generating units (FL, IN, MD MN, NY NC, PA, SC, TX), it becomes apparent that each allocation approach makes some States better off and others worse off.

(See "CAIR SO2 Allocation Approach Analysis" Technical Support Document available in the docket)⁵ While using a heat input with fuel factors approach would provide an advantage to many of the States that provided adverse comments on title IV, shifting to this approach would disadvantage 10 of the 23 States (DC is not counted) relative to the title IV approach.

Table III.A.2 - States Share of Budget under Various Allocation Approaches

State	EPA Title IV	Average 1999 - 2002 (Pure) Heat Input	1999 - 2002 Heat Input w/ Fuel Factors	1999 - 2002 Heat Input w/ Fuel Factors & Coal	Average 1999 - 2002 Heat Input Coal + Oil	Average 1999 - 2002 Emissions	Average 1999 - 2002 Output All	Average 1999 - 2002 Output Fossil
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⁵ Also, it is worth noting that these many of the commenters are all in cost-of-service States, where they should be able to pass through costs. In other words, sources in these States are likely to recover their cost of compliance, and the rate impact in these States, spread over all generation, transmission, and distribution is likely to be minimal. EPA's Regulatory Impact Analysis for CAIR forecasts an increase of only about 2.0 percent and 2.7 percent in average electricity prices in the CAIR region in 2010 and 2015, respectively. Florida is projected to experience an increase in retail electricity prices of 0.8 percent in 2010 and 1.4 percent in 2015. Also, the region containing North Carolina and South Carolina is forecast to have retail electricity price increases lower than the regional average increases under CAIR in 2010 and 2015.

				Type				
AL	4.4%	4.3%	4.9%	5.2%	4.7%	5.0%	4.7%	4.2%
DC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FL	7.0%	7.7%	5.6%	6.7%	7.3%	6.0%	7.2%	7.7%
GA	5.9%	4.1%	4.7%	5.3%	4.5%	5.2%	4.5%	4.2%
IA	1.8%	1.9%	2.4%	1.2%	2.3%	1.4%	1.5%	1.8%
IL	5.3%	4.7%	5.4%	4.4%	5.2%	4.7%	6.6%	4.4%
IN	7.0%	6.5%	7.9%	7.9%	7.5%	8.6%	4.6%	6.2%
KY	5.2%	4.9%	6.0%	7.3%	5.8%	5.8%	3.5%	4.5%
LA	1.7%	3.3%	1.6%	1.0%	1.5%	1.1%	3.4%	3.6%
MD	2.0%	1.8%	1.9%	2.3%	2.0%	2.7%	1.9%	1.7%
MI	4.9%	4.2%	4.4%	3.7%	4.3%	3.7%	4.1%	4.2%
MN	1.4%	1.9%	2.3%	1.1%	2.2%	1.0%	1.9%	1.7%
MO	3.8%	3.6%	4.3%	2.3%	4.1%	2.4%	2.9%	3.4%
MS	0.9%	1.4%	1.0%	1.0%	1.1%	1.2%	1.6%	1.6%
NC	3.8%	3.7%	4.5%	5.5%	4.3%	4.7%	4.5%	3.8%
NY	3.7%	4.0%	2.2%	2.7%	3.4%	2.7%	5.3%	3.9%
OH	9.2%	6.4%	7.9%	9.6%	7.5%	12.2%	5.4%	6.5%
PA	7.6%	6.0%	7.1%	8.4%	6.9%	9.5%	7.4%	6.1%
SC	1.6%	2.0%	2.3%	2.9%	2.2%	2.1%	3.4%	2.0%
TN	3.8%	3.0%	3.7%	4.4%	3.5%	4.0%	3.5%	3.0%
TX	8.9%	15.3%	9.4%	5.5%	9.0%	6.0%	13.9%	16.6%
VA	1.8%	2.3%	2.5%	3.1%	2.5%	2.3%	2.8%	2.3%
WI	2.4%	2.5%	2.9%	1.8%	2.8%	2.0%	2.2%	2.2%
WV	6.0%	4.4%	5.4%	6.7%	5.2%	5.8%	3.4%	4.5%
	100%	100%	100%	100%	100%	100%	100%	100%
# of times method provides least allowances	3	4	1	7	0	2	4	4
# of times method provides most allowances	2	1	5	6	0	4	4	4
Total (most + least)	5	5	6	13	0	6	8	8

Source: EPA, 2006

Note: For NOx, EPA calculated a separate region-wide budget

for New Jersey and Delaware using the same approach that was used to calculate the larger CAIR region-wide budget. This region-wide budget was then apportioned to individual State budgets using the same approach used in CAIR. Because New Jersey and Delaware were treated separately in the context of NOx allocations, EPA has not included them in the SO2 analysis.

Two commenters performed alternative analyses of State budgets, modeled after the calculations done for the CAIR Reconsideration related to NOx budgets (CAIR Statewide NOx Budget Calculations, EPA Docket Number OAR-2003-0053, December 2005). The commenters claim that their analysis proves that EPA's SO2 allowance allocation approach is inferior to a fuel-adjusted heat input method, such as the allocation approach used in the CAIR NOx model trading rule.

They assert that EPA's analysis of NOx allocation methodologies is also the appropriate way to compare the reasonableness of the SO2 allocation alternatives.

As EPA explained in the Technical Support Document for the Agency's NOx budget analysis ("CAIR Statewide NOx Budget Calculations," available in the docket), to quantitatively evaluate whether the fuel factor approach is providing States with annual NOx budgets that more closely reflected their projected emissions, EPA calculated the arithmetic mean of the (absolute) difference between the ratio of each State's allowance allocation under each approach to its projected emissions under CAIR (coverage ratio), and 1.0

(i.e., the value representing a State's projected emissions matching the State's CAIR NOx budget). In other words, EPA calculated how far off the State's coverage ratio was from 1.0, and then determined the average value of this difference for each approach.

One commenter performed a similar analysis of State budgets, comparing each State's projected emissions to its projected allowances under each allocation approach. The commenter analyzed the results in relation to a coverage ratio of 1.0 (as EPA did in its NOx analysis) and averaged the values for each approach. Another commenter performed a similar analysis but presented the results as the cumulative value (sum) of absolute differences between the coverage ratios and 1.0.

EPA disagrees with the commenter's assertion that the methodology that the Agency used to evaluate State NOx allocations should be the primary means by which to evaluate the reasonableness of the SO2 allocation methodology. As explained in the CAIR preamble, in the case of SO2, EPA needs to balance various considerations, including the need to allocate SO2 allowances in a way that is less disruptive to the title IV program. In light of these considerations, minimizing the disparity between a State's allocation and projected emissions cannot be the primary objective. For

SO₂, there is a pre-existing national trading program (the Acid Rain SO₂ trading program) that Congress intended to continue as a viable program into the future and under which allowances have been allocated in perpetuity. For NO_x, there is no pre-existing national trading program where efficiency and effectiveness would be jeopardized by creating new CAIR NO_x allowances. There is, of course, a pre-existing regional NO_x ozone-season program covering a portion of the CAIR region (the NO_x Budget Trading Program, established by regulation, rather than directly by Congress). Under the existing NO_x ozone-season program, no State has allocated allowances past 2009 (and only a handful of States have allocated allowances past 2008). Therefore, in contrast with EPA's determination concerning SO₂ allocations, evaluation of potential approaches to NO_x allocations did not involve concerns about Congressional intent to preserve an existing trading program and about preserving the value of allowances already allocated in perpetuity. For NO_x, EPA does not need to consider other important policy concerns that are important for SO₂.

While the methodology used by EPA to evaluate NO_x allocation methodologies for CAIR can be applied to analysis of SO₂ allocations, EPA believes that the commenters performed their State-by-State analyses incorrectly,

overlooking a fundamental difference between the CAIR NO_x and SO₂ trading programs, which is the existence of a significant bank of pre-2010 allowances that will be eligible for use for compliance with CAIR. Because of the existence of a SO₂ allowance bank, EPA believes that the commenter's comparison of allocation approaches using a coverage ratio of 1.0, which would assume that in a given year total SO₂ emissions in the region are equal to the total region-wide SO₂ budget, is not appropriate for evaluating the SO₂ State budgets resulting from the various SO₂ allocation methodologies. A State that had a coverage ratio of 1.0 would have enough allowances to cover its emissions, and, while this ratio would be a meaningful target in the context of the CAIR NO_x trading program, it is not for SO₂, because 2010 and 2015 emissions will be higher than the region-wide cap due to the use of banked allowances. For SO₂, the region-wide ratios of allowances to projected emissions are 0.70 for 2010 and 0.60 for 2015.

On average, one would expect States to have coverage ratios similar to the region-wide average.

While in both the NO_x annual and NO_x ozone season trading programs some allowances beyond the State Budgets (i.e., compliance supplement pool allowances in the annual program and banked allowances from the NO_x Budget Trading

Program in the ozone-season program) will be available to sources, the amount of these extra allowances will be too small to affect the State-by-State NOx analysis.

Consequently, EPA believes that a more appropriate way to evaluate SO2 allocation methods is to use the 0.70 (for 2010) and 0.60 (for 2015) coverage ratios, rather than a ratio of 1.0. Further, because each allocation approach results in allocation that are advantageous for different companies and States, EPA believes that the reasonableness of a given allocation approach should be judged by its overall impact on companies and States, not its specific impact on any single company or State or on a few companies or States.

EPA has redone the commenters' analysis, using the methodology used by EPA in its analysis of NOx allocations and corrected coverage ratios described above. This analysis is presented in the "CAIR SO2 Allocation Approach Analysis" Technical Support Document available in the docket. While the title IV SO2 allocation approach does not perform the best of the allocation approaches considered using this metric, the differences observed among the approaches are of a lower magnitude than those suggested by the commenters. The commenters did not provide any benchmark in their analysis for assessing whether or not a

given allocation approach was reasonable. Further, although the commenters discuss some of the implications of the differences observed between an allocation approach based on fuel factors and the allocation approach based on title IV, they do not conclude their analyses with any meaningful arguments that EPA's approach is not reasonable.

As EPA noted earlier in this section, there are a number of ways by which to assess the equitability of a given allowance allocation approach. EPA believes that a further understanding of the overall relative impacts of the various allocation approaches, EPA believes that it is useful to apply the statistical concepts of (1) bias and (2) consistency. EPA determined that an appropriate statistic for examining the bias of a given allocation approach is the average difference between a State's coverage ratio and the coverage ratio for the entire region (e.g., 0.70 for 2010 or 0.60 for 2015). The degree of bias inherent in a given allocation approach cannot be discerned from the absolute value statistic, because it ignores the degree to which positive and negative differences cancel each other out. A perfectly unbiased distribution under a given allocation approach would be one that resulted in an average difference of zero, meaning that on average a State-by-State coverage ratio higher than the regional coverage ratio is balanced

out by a ratio below. Another useful statistic is the percent of instances in which the allocation approach yields a State coverage ratio that is high (or low) relative to the regional coverage ratio. Lack of bias would be indicated if 50 percent of the State coverage ratios are higher than the regional coverage ratio and 50 percent are lower.

EPA evaluated the four allocation approaches considered during the CAIR rulemaking (title IV, pure heat input, heat input with fuel-factors, and heat input with fuel factors and coal type factors) along these metrics. From EPA's calculations (Table III.A.3), all the approaches are biased high for 2010 and all but one is biased high for 2015 (with CAIR controls). The average differences for EPA's approach, 0.06 in 2010 and 0.17 in 2015, are among the closest to zero compared to the alternatives examined. The one approach (heat input with fuel and coal adjustment factors) that exhibits less bias than the title IV approach in 2010 exhibits bias of the same magnitude (but opposite direction) as the title IV approach in 2015. In addition, the percent of positive differences for EPA's approach for 2010 and 2015 are near 50 percent and do not greatly vary from the alternative methods analyzed. This demonstrates that EPA's approach provides a reasonable result.

Table III.A.3. Evaluation of Bias and Consistency of

Four Different SO2 Allocation Approaches, 2010 and 2015

	2010				2015			
	EPA Title IV	Average 1999 -2002 (Pure) Heat Input	1999 - 2002 Heat Input w/ Fuel Factor s	1999 - 2002 Heat Input w/ Fuel Factor s & Coal Type	EPA Title IV	Average 1999 -2002 (Pure) Heat Input	1999 - 2002 Heat Input w/ Fuel Factor s	1999 - 2002 Heat Input w/ Fuel Factors & Coal Type
Average Difference	0.06	0.11	0.06	0.05	0.17	0.18	0.14	-0.17
Percent Positive	43%	39%	52%	48%	43%	43%	43%	52%

Source: EPA 2006

Potential for Regional Emissions Increases

As discussed above and in the CAIR preamble, another important reason for use of the title IV allowances is to avoid SO2 emissions increases in 2010 and thereafter in non-CAIR States. If title IV allowances were not used in the CAIR SO2 trading program, the resulting reduction in the value of title IV allowances would result in an increase in emissions in non-CAIR States. EPA estimates that emissions "leakage" of title IV allowances from the CAIR region into the non-CAIR region would be approximately 260,000 tons annually in 2010 and thereafter (See 70 FR 25293).

One commenter argues that EPA has not sufficiently evaluated and compared the impact of the potential for increases in CAIR region emissions under the approach of using title IV allowances that could result from allocations

to title IV opt-in units and title IV allowances traded into the CAIR region from non-CAIR States to the potential for emissions increases in non-CAIR States from "leakage" of title IV allowances from CAIR States to non-CAIR States under an allocation approach that does not rely on title IV.

EPA has, in fact, considered the issue of emissions "leakage" outside of the CAIR region throughout its analysis of CAIR and has also analyzed the potential increases outside of the CAIR region if EPA were to not use an allocation system based on title IV. EPA estimates, based on its CAIR analysis, that title IV allowances from the non-CAIR region equivalent to about 150,000 tons of SO₂ emissions may be traded into the CAIR region in 2010, which represent about 4 percent of the projected CAIR region emissions in 2010. This compares to approximately 260,000 title IV allowances, representing that many tons of SO₂ emissions, that sources in non-CAIR States would have incentive to use to cover emissions at little to no cost, if we chose an alternative system that is not based on title IV (an increase equal to about 30 percent of the 0.9 million tons of emissions EPA projects for non-CAIR region). This increase would occur because title IV allowances would have no economic value.

EPA has also considered the impact of opt-in unit

allocations and projects that in 2010 allowances equivalent to approximately 25,000 tons could be generated by units opting into the Acid Rain Program and used for compliance in the CAIR SO₂ trading program. This is less than one percent of the projected CAIR region-wide emissions in 2010. (See the spreadsheet "SO₂ Allocation Approach Analysis Data – Owner and Parent Comparison" available in the docket). Thus, EPA believes that the effect of selecting the title IV allocation approach for SO₂ under CAIR will not significantly affect the overall SO₂ emission reduction objectives of the rule.

It should also be noted that an alternative to including non-title IV sources under CAIR and allowing them to use opt-in allowances from title IV would be excluding these units altogether from CAIR. In choosing to opt in to title IV to provide allowances for use under CAIR, these units would have to reduce emissions from the baseline at which they were allocated in order to generate excess title IV allowances. Thus, actual cumulative net emissions increases within the CAIR region from title IV opt-in sources subject to CAIR are unlikely. Alternatively, excluding these units from CAIR and keeping the same SO₂ allowance retirement ratios (and the same State budgets) would achieve many, but not all, of the highly cost-

effective SO₂ reductions and could result in emissions leakage within the CAIR region at these sources, as generation (and thus emissions) shift from the EGUs covered by the cap to EGUs not covered by the cap.

Opting into the Acid Rain Program

As discussed above, EPA's analyses of the distribution of allowances under EPA's allocation approach included allowances allocated to CAIR units that can opt into the title IV Acid Rain Program. The statutory and regulatory provisions governing Acid Rain Program opt-in units allow units that are subject to CAIR, but not to the Acid Rain Program, to opt into the Acid Rain Program. Under section 410(a) of the Clean Air Act, the owner or operator of any unit that emits SO₂ and "is not, nor will become, an affected unit" under the general applicability provisions of CAA title IV (i.e., starting in 2000, CAA sections 403(e) (for new units) and 405 (for existing units)) may apply to have the unit become an opt-in unit under the Acid Rain Program. 42 U.S.C. 7651i(a). (The separate treatment of "process sources" under sections 410(a) and (e) is not applicable to electric generating units covered by CAIR.) Section 410 was added to the Clean Air Act by the Clean Air Act Amendments of 1990, which were enacted on November 15, 1990.

EPA interprets section 410(a) to allow any SO₂-emitting unit not currently covered by the general applicability provisions to opt into the Acid Rain Program and receive SO₂ allowances, provided that certain requirements (e.g., emissions monitoring and reporting requirements under part 75 of the Acid Rain regulations) are met. The use of two separate terms, one to refer to a unit that "is not" an affected unit, and the other to refer to a unit that "will not become" an affected unit reflects the fact that there are two separate applicability provisions, section 405 applying to units in existence and generating electricity for sale when the CAA Amendments were enacted and section 403(e), applying to units to be constructed at some later date. In short, section 410(a) included language using both a verb in the present tense (i.e., "is not") to refer to existing units and a verb in the future tense (i.e., "nor will become") to refer to begin generation or begin construction in the future. EPA does not interpret the term "nor will become" to bar, from opting in, currently operating units that are not covered by the generally applicability provisions but that may become subject to those provisions sometime in the future. Consequently, a unit that currently has an exemption from the general applicability provisions (e.g., an exempt cogeneration unit

under CAA section 402(17)(C) or 405(g)(6)(A)), may opt in under section 410(a)) even if the exemption may be lost sometime in the future. Such a unit may become and remain an opt-in unit until the unit loses its exemption.

This interpretation of section 410(a) is reflected in the implementing regulations. For example, § 74.2 states that the opt-in regulations apply to units that "are not affected units under § 72.6 [the general applicability provisions]...and that are operating and are located in the 48 contiguous States of the District of Columbia". 40 CFR 74.2. The opt-in regulations do not exclude operating units that are currently exempt from the general applicability provisions but that may subsequently lose their exemption. Moreover, § 74.46(b)(iii) specifically addresses how to treat opt-in allowance allocations for operating units that opt in but subsequently become subject to the general applicability provisions. The provision explains how to treat such allowance allocations for the year in which the units lose their exemption and for subsequent years. This supports EPA's interpretation that currently exempt units may become opt-in units even though they may lose their exemption in the future.

EPA notes that the additional cost for CAIR units of opting into the Acid Rain Program will be minimal. The

major cost for any unit to opt in is the cost of meeting emissions monitoring and reporting costs under part 75. Whether or not they become Acid Rain Program opt-in units, all units under CAIR already have to meet, and incur the costs of, part 75 emissions monitoring and reporting requirements. EPA also notes that currently under the Acid Rain Program only a small number of units have opted into the program. Because EPA anticipates that the existence of the CAIR program will result in more units opting in, EPA will work with potential opt-in sources to consider opportunities to improve the opt-in program.

B. Fuel Adjustment Factors Used to Set State NO_x Budgets

As described in the December 2, 2005 Notice of Reconsideration for CAIR, EPA received several petitions for reconsideration asking EPA to reconsider its decision to use fuel adjustment factors (FAF) to establish NO_x budgets for State in the CAIR region. Petitioners contended that the Agency did not provide adequate notice and that the use of the FAF approach adversely impacted States with large gas- and oil-fired generation portfolios. Given the significant public interest in this issue, EPA granted reconsideration and solicited additional public comment on this issue.

The Notice of Reconsideration explained that EPA believes that it provided adequate notice both that the fuel

adjustment factors might be used and of the calculation procedures that it would use to determine the specific factors. Nevertheless, in light of the significant public interest in this issue, EPA granted reconsideration on the use FAFs (i.e., 1.0 for coal, 0.4 for gas, and 0.6 for fuel oil) in the development of statewide NO_x budgets. The Notice of Reconsideration provided an additional opportunity for public comment on the issue and presented additional analysis that EPA conducted to further explain the impact of these factors on State annual NO_x budgets. That additional analysis demonstrated that the factors selected are reasonable and decrease the disparity between most States' projected electric generation unit (EGU) emissions and their State NO_x budgets. The Notice of Reconsideration did not propose to change any aspect of how the CAIR apportions the regionwide NO_x budget among States.

Today's action responds to public comment received on the Notice of Reconsideration and presents some additional analysis that supports the analysis presented in the Notice of Reconsideration.

Background on the Use of NO_x FAFs in the Statewide NO_x Budgets

The CAIR establishes regional emission budgets for annual and seasonal NO_x emissions. These regional budgets

are then further divided into State budgets, with a share of each total regionwide budget apportioned to each State in the corresponding CAIR region. The CAIR determines each State's pro-rata share of the regionwide budget by using that State's share of the regionwide heat input, as adjusted by the FAFs (i.e., 1.0 for coal, 0.4 for gas, and 0.6 for fuel oil). Petitioners asked EPA to reconsider this methodology.

As explained in the Notice of Reconsideration, States choosing to participate in the trading program may allocate their statewide budgets to sources in their respective State. In a cap-and-trade system, however, the methodology used to allocate allowances in any given year would not affect where control technologies are installed.⁶ Rather, the determinant would be the cost of adding controls compared to the cost of buying, or the profit from selling, allowances. Controls are expected to be installed where it is relatively less expensive, without regard to which units received the initial allocation of allowances. Further, the total cost to industry of controlling emissions and the

⁶ A permanent allocation approach, such as the CAIR allocation methodology in the model trading rules, should not affect where controls are installed. This is true regardless of the type of approach used to permanently allocate allowances (e.g., heat input, adjusted heat input,

total amount of reductions achieved would not be affected by the allocation methodology in a given year (for a permanent system). The allocation method, however, could have financial impacts on individual units and companies. A unit that receives more allocations than it has emissions would get a benefit at the expense of a unit that does not receive enough allocations to cover its emissions. While States choosing to participate in the cap-and-trade program can determine how to allocate allowances among their units, companies in States whose budgets exceed projected EGU emissions would likely receive a financial benefit while companies in States whose budgets are lower than their EGU emissions would likely incur additional costs. In the absence of other considerations, EPA believes that it is in the public interest to reduce the disparity between the number of allowances in a State budget and total projected State EGU emissions. In the case of NO_x allowances, there are no considerations that offset the desirability of reducing the disparity between a State's budget and projected emissions. This contrasts with the case of SO₂ allowances, as described above, where there are counterbalancing considerations, such as the importance of

or output). The use of an updating allocation system, on the other hand, could have some impact future generation.

preserving the efficacy of the existing title IV SO₂ trading program.

1. Summary of Additional Analysis Presented in the Notice of Reconsideration

The Notice of Reconsideration presented two analyses that EPA conducted to evaluate the potential impact of using the adjusted heat input method versus the simple heat input method on State annual NO_x budgets: one regionwide analysis and a second State-by-State analysis.

The regionwide analysis of the potential impacts compared regionwide budgets using both approaches (i.e., simple heat input and fuel factor) to the regionwide projected emissions of units fired with that fuel.⁷ That analysis illustrated that: under either approach, the portion of the State budgets derived from the heat input from the gas-fired units generally exceeds both the historical and the future projected emissions from these units; the fuel factor approach generally provides additional allowances to States with large amounts of coal-fired units that are making the majority of the investments in emission control measures and technologies; and, using

⁷ It should be noted that simple heat input or adjusted heat input are used to set State budgets and do not imply that States would allocate allowances to units in that manner. In the proposal, EPA gives States flexibility in the

the fuel factor approach, the disparity between the number of allowances provided to each type of fossil fuel-fired electric generation and the projected emissions for each fossil fuel type is less than under the simple heat input method.

The second analysis presented in the Notice of Reconsideration examined the potential impacts of the two approaches for developing Statewide budgets (i.e., simple heat input and fuel factor) on a State-by-State basis. That analysis showed that States receiving fewer allowances using a fuel factor approach, generally still receive Statewide budgets that are greater than their projected emissions in 2009 and 2015. This results because a substantial portion of their generation portfolio consists of gas-fired sources with generally low NOx emission levels. More specifically, the analysis illustrated that while States dominated by gas-fired generation (i.e., District of Columbia, Florida, Louisiana, Mississippi, New York, and Texas) receive fewer allowances under a fuel factor approach, they are provided with reasonable Statewide budgets that are comparable to their projected emissions in 2009 and 2015. In addition, this analysis shows that, relative to the simple heat input method, the fuel factor method reduces the disparity between

distribution of allowances.

projected State emissions and State budgets, e.g., allocating State budgets that are generally closer to projected State emissions.

EPA conducted the same analyses for the annual NOx programs proposed for Delaware and New Jersey, which are being included in the CAIR PM2.5 finding of significant contribution in a separate rulemaking published today. This analysis showed results similar to that found for the other CAIR PM2.5 States.

Finally, to ensure that our estimates appropriately reflect the distribution of emissions in the case of higher electricity demand and increased gas and oil prices, the Notice of Reconsideration presented EPA analysis based upon a sensitivity run using EIA's forecast of higher electricity demand and gas and oil prices. This run produced very similar emissions results to the original NOx analysis, showing that EPA's original analysis is robust enough to support the fuel adjusted heat input approach finalized in CAIR. (See the "CAIR Statewide NOx Budget Calculations Technical Support Document, EPA 2005, for additional discussion of the analysis.)

2. Public Comments on Analysis Presented in the Notice of Reconsideration

Many commenters supported the EPA analysis presented in

the Notice of Reconsideration that demonstrated that:

- under either approach, the portion of the State budgets derived from the heat input from the gas-fired units generally exceeds both the historical and the future projected emissions from these units;
- the fuel factor approach generally provides additional allowances to States with large amounts of coal-fired units that are making majority of the investments in emission control measures and technologies; and,
- using the fuel factor approach, the disparity between the number of allowances provided and the emissions is less than under the simple heat input method.

Adverse Comments on the Notice of Reconsideration

a. Comments on EPA's Characterization of Operational Costs for Low-Emitting Generation in Analysis

Some commenters contended that EPA analysis of the projected impacts on different types of power generation (i.e., coal-fired, gas- and oil-fired units) was inaccurate because it did not reflect inherent differences in the cost (e.g., fuel costs) to operate each type of unit.

Specifically, the commenters claim that gas-fired units "have incurred historical costs to burn a cleaner but higher-priced fuel." The commenter continues with "while

gas-fired plants have continually paid the price for cleaner fuels, under CAIR these owners may be penalized with additional costs of purchasing allowances." The commenters believed that, as a result, EPA analysis of the potential impacts of using the FAF approach - which was based on comparing CAIR NOx allowances to the projected emissions - has not properly considered the economic impacts to these units and their customers.

EPA disagrees that higher fuel costs of oil- and gas-fired units are not properly considered in the analysis of potential impacts of using the FAF method in developing statewide NOx budgets. In projecting which sources would install advanced controls under CAIR, EPA modeling factored in the operating characteristics of the each source, including fuel costs.⁸ This modeling showed that coal-fired units - not gas- and oil-fired units - would make the significant investment in advanced controls in order to achieve the CAIR mandated emission reductions. The commenter did not demonstrate that EPA modeling, used in the development of CAIR and the Notice of Reconsideration analysis, mischaracterized the operating costs of these units. Further, the commenter did not explain how a

⁸ IPM modeling uses "model plants" to represent the characteristics of a group of actual facilities.

decision to build a gas- or oil-fired unit prior to CAIR that has high operating costs, warrants an award of valuable allowances to offset operating costs that they would have with or without CAIR. Notably, although natural gas inherently burns with lower NOx emissions, its choice in the CAIR region historically is based much more on the economics to meet electric demand requirements - electric generation from natural gas has been the cheapest approach.

In addition, it is not clear why the commenter believes that using the FAF approach would result in gas-fired units having to purchase NOx allowances. Analysis presented in the Notice of Reconsideration showed that, in general, States that with predominantly gas- and oil-fired generation are provided with reasonable statewide budgets that are comparable to their projected emissions in 2009 and 2015. If the States were to directly pass through allowances to their gas-fired units, these units would still have excess allowances. Furthermore in most cases, these States still receive a larger budget than they need to cover their projected emissions.

In conclusion, EPA believes the projected emission levels used in EPA's analysis of the potential impacts of using a FAF method to apportion statewide NOx budgets appropriately considers the operational costs of oil- and

gas-fired units.

b. Comments on EPA Projections of Oil- and Gas-Fired Boilers Retirement and Impacts on Analysis

A few commenters believed that EPA inaccurately accounted for their projected emissions because the IPM modeling did not consider requirements, outside of environmental regulatory programs, to maintain reserve electricity generation capacity. The commenter claims that, as a result, there are oil-fired units that would continue to operate even though IPM projects that they would retire because they are no longer economical to run. The commenter believes that this potential underestimation of projected NO_x emissions is significant enough to change the outcome of EPA's analysis which demonstrated that predominantly gas-fired States would have receive CAIR NO_x allowances sufficient to account for their future NO_x emissions.

EPA disagrees with the commenters' contention that the potential underestimation of emissions for oil-fired boilers would significantly impact the EPA's analysis comparing apportioning statewide NO_x budgets using simple heat input and the FAF approach. The EPA analysis showed that Florida, the State of concern to the commenter, has coverage ratios (i.e., the ratio of the statewide NO_x budget and the projected NO_x emissions) of 1.45 and 1.35 under CAIR in 2009

and 2015, respectively. In other words, the statewide NOx budget provides 145 percent of the allowances that Florida sources would need to account for their projected emissions.

EPA modeling projected that approximately 11 percent of the oil- and gas-fired generation capacity (other than coal-fired generation and combined-cycle turbines) would retire early in both 2009 and 2015, respectively. These retirements comprise 4 and 5 percent of Florida's total capacity in 2009 and 2015, respectively. Even if it was necessary for all of these units to remain in operation to comply with requirements for reserve capacity, it is not clear that this relatively small portion of the total capacity would emit enough NOx to significantly change the outcome of the EPA analysis. Should all or some portion of these units remain in service, Florida's NOx budget - which is 45 percent and 35 percent above their projected emissions according to EPA analysis - would have a surplus of allowances that it could provide to these units to offset emissions. Further, these units could choose to reduce their emissions using a range of advanced control options that, in some cases, achieve greater emission reduction levels than found in coal-fired units.

3. Public Comment on the Notice of Reconsideration

Discussion of Notice

Several commenters supported EPA's position that adequate notice was provided on the use of FAFs in the development of the statewide NOx budgets. Many of these commenters also supported the analysis EPA presented in the Notice of Reconsideration (discussed below.)

Other commenters maintained that the final CAIR did not provide sufficient notice on the use of the FAF approach to developing statewide budgets. The methodology used for developing the statewide budgets, the FAFs, and the actual statewide budgets were discussed in detail in the CAIR NFR (70 FR 25230) and supporting documentation.⁹ By granting reconsideration and, thereby, requesting public comment on this issue in response to the Notice of Reconsideration, the Agency has provided an additional opportunity for public involvement. As a result, EPA believes that it provided ample notice and opportunity for comment on the use of fuel adjustment factors, the calculation procedures used to determine the specific factors, and the specific factors themselves.

4. Use of FAF Approach to Determining Statewide NOx Budgets

⁹ Both the "Corrected Response to Significant Public Comments on the Proposed Clean Air Interstate Rule" (pp. 520-576) and the "Technical Support Document for the Clean Air Interstate Rule Notice of Final Rulemaking, Regional and State SO₂ and NO_x Emissions Budgets" include information on the use of FAFs for developing the statewide NOx budgets.

in the Final CAIR

Today's action does not change the use of the FAF methodology to determine the statewide NOx budgets for the CAIR. While EPA believes that adequate notice was provided on the use of the FAF approach and the specific FAFs, EPA granted the petitions on this issue in consideration of general public interest in the matter. EPA believes that today's action, in conjunction with the Notice of Reconsideration, adequately responds to concerns raised by the petitioners.

C. PM2.5 Modeling for Minnesota

One Petition for Reconsideration asked EPA to reconsider whether emissions from Minnesota significantly contribute to downwind nonattainment of the PM2.5 NAAQS. The petitioner (Minnesota Power, or MP) asserted that EPA's modeling failed to account for certain emissions reductions required by State programs (especially those required under the Minnesota Emissions Reduction Program, or MERP). In granting reconsideration, EPA explained that it was aware of the emission reductions in question when it made the significant contribution determinations in the final CAIR. EPA had accounted for these reductions during the rulemaking by conducting a sensitivity analysis (available in the CAIR docket), but had not conducted revised air quality modeling

(70 FR at 72279-280). In response to the reconsideration petition, EPA conducted revised air quality modeling which used the inputs reflecting emission reductions required by the MERP. This modeling showed (consistent with the sensitivity analysis) that Minnesota contributes a maximum of 0.20 ug/m3 to the downwind PM 2.5 nonattainment area of Chicago-Gary-Lake County, IL-IN. This modeling thus supported EPA's conclusion that Minnesota's contribution met the criteria in CAIR for determining "significant contribution." Id. This revised air quality modeling used the same modeling platform used for all of the air quality modeling in CAIR. In the Notice of Reconsideration, EPA solicited comment on the inputs used to model Minnesota emissions, but declined to reconsider or reopen for public comment issues relating to the air quality modeling platform itself. Id. at 72280.

Most of the comments received on this issue in response to the Notice of Reconsideration supported EPA's conclusion.

These include comments from the Minnesota Pollution Control Agency (MPCA), the entity with the most direct knowledge of emission reductions required by state programs. EPA also received no adverse comments from Xcel Energy, the entity that entered into the MERP with the MPCA and whose projected emission levels were the centerpiece of the reconsideration

petition. In fact, no other power generation source in the Minnesota besides Minnesota Power offered adverse comments.¹⁰ EPA views these comments as confirmation of the reasonableness of the modeling approach used by EPA to assess significance of contribution of the State. EPA also views these comments as confirmation that its revised modeling accurately accounts for the MERP reductions.

Minnesota Power (MP) did not comment on the revised emissions modeling done for power sector units in Minnesota and instead directed its comments to the original emissions modeling done for the Final CAIR that did not fully account for the MERP reductions. MP does not directly challenge EPA's conclusion that the revised modeling accurately accounts for the emission reductions required by the MERP. MP claims, nonetheless, that the model inputs for the final CAIR modeling (not the modeling done for the Notice of Reconsideration, as just noted) contain errors. To the extent these alleged errors relate to the MERP, EPA has corrected the errors as explained above.¹¹ The additional

¹⁰ Another power company in the Midwest region, Midwest Generation, supported EPA emissions assessment for Minnesota.

¹¹ The revised IPM modeling performed for the reconsideration fully accounted for emission reductions attributable to the MERP. These include emission reductions from the repowering of the two units at the Riverside plant from coal to natural gas and the retirement of a third coal

"errors" of which MP complains relate to inputs regarding the projected 2010 emissions for certain units in Minnesota.

Although MP states that EPA has mischaracterized emissions from some units, EPA believes that the emissions projections done to provide inputs for the revised air quality modeling described in the Notice of Reconsideration are appropriate.

EPA believes its method of projecting power sector emissions for units in Minnesota reflects a more accurate and robust method for projecting emissions than the method used by MP. MP presents a method for projecting 2010 emissions for certain select units using the combination of a 2001 emission rate (based on Title IV data) and EPA's projected 2010 heat input projection under the 2010 base case (no CAIR). MP applies this method to several of its own units and several owned by Xcel Energy.

MP claims that if these lower emissions were used as

unit at the plant. The inputs to the revised modeling for the Notice of Reconsideration also accounted for emission reductions from retrofit of the coal unit at the Allen S. King plant with advanced pollution controls (scrubber for SO₂ removal and selective catalytic reduction technology for NO_x removal) and for emission reductions from re-powering of two units at the High Bridge plant that will re-powered from coal to natural gas. It should be noted that MP has submitted revised projected emission levels for certain Xcel units covered by the MERP. These projections do not correspond precisely with the projections EPA used in its revised modeling (but are very similar). However, as explained below, EPA believes the projections for these

inputs to the PM2.5 modeling, that modeling would show that Minnesota's contribution is below the PM2.5 significance threshold of 0.2 $\mu\text{g}/\text{m}^3$. However, the petitioner was selective in its application of its methodology for projecting emissions. MP applies their method only for units where that method results in emissions projections that are lower than the original EPA emissions projections.

Application of this approach to all units in Minnesota would result in emissions levels for several units in 2010 that are above EPA's projections. In such cases, however, MP relies upon the lower EPA projections. It is also unclear why Minnesota Power used 2001 data to develop 2010 emission levels, rather than 2004 data, for example. Data from 2004 (as opposed to 2001 data), used in the manner MP has done, would produce different emissions levels of SO₂ and NO_x in 2010 for every unit in Minnesota. Selectively developing projections in this manner is an insufficient approach for developing power sector forecasts (see further discussion on IPM below).

MP also comments that "EPA had erroneously assigned 2010 sulfur dioxide emission rates on scrubbed Minnesota units at values as much as double that of the performance

units used by EPA are more accurate than the projections MP suggests should be used.

levels posted in 2001." MP Comment p. 4. After reviewing the modeling results, EPA is unable to find any instances in Minnesota where EPA projected SO₂ emission rates of scrubbed units from the revised power sector modeling that are double that of the 2001 performance level. Id. Although the emission rates are higher in EPA 2010 projections for the 3 Sherburne County Plant units than 2001 levels, they are well within permitted levels at those units and reflect projected changes in unit operations to maximize efficiency (see further discussion on IPM below).

MP also claims that "NO_x emission rates deviated between 2001 and 2010 without supportive operating rationale." Id. The difference in NO_x rates that MP alludes to is again based upon the modeling for the Final CAIR, not for the Notice of Reconsideration. In addition, MP's characterization is inaccurate. First and most important, EPA's 2010 projections of NO_x emission rates are generally lower than 2001 NO_x emission rate data for Minnesota units. EPA's projections show that for the 7 non-MERP units in Minnesota where MP provided revised NO_x emission estimates, 4 units have lower emission rates in 2010 under EPA projections and only 3 units will have higher emission rates (compared to 2001 data). Of the 3 units where the 2010 emission rate values are higher for those units in EPA

revised emissions modeling versus 2001 data, EPA finds that one unit is higher by 2 percent and two units are higher by about 7 percent. Differences in emission rates of this magnitude can occur for a variety of reasons and without significant operational changes to a particular unit. Also, the petitioner has also failed to demonstrate that EPA's projected NOx emission rates are inaccurate.

Another comment from MP stated that "the EPA IPM modeling had shifted heat input from large, lower emission units to higher emission units." Id. A comparison of the historical data from 2001 with the revised emissions modeling does not support this broad conclusion. Heat input usage does not change significantly, and although there are some shifts in heat input usage between 2010 EPA projections and the 2001 data, these shifts occur where the IPM projects it will be cost-effective to make relatively small changes to where electricity is produced. In addition, EPA does not accept the suggestion that because a certain rate applied in 2001 it should be applied in 2010. This argument is not adequate and ignores the many other factors that may change in the future which could cause a change in the way a unit produces electricity. These include (among others) fuel supply and demand dynamics, the cost of technologies to reduce emissions, relative performance changes in power

generation technologies, and the price of an allowance. EPA used a version of IPM completed in 2004 that incorporated the best available data for EPA's power sector database and the most recent cost and performance of technologies at that time, focusing on what emissions and emission rates are likely to occur in 2010 with full consideration of all the key factors of power plant operations that can influence future emission levels.

The power sector is a complicated, interrelated, and interdependent system of operation, and must be looked at holistically to ascertain the sector's response to a certain set of conditions or constraints. The petitioner's approach selectively chooses the methodology for determining emissions at certain units and ignores the changes that may occur at other units as a result. In addition, it is easy to question the choices or assumptions that one makes for selective forecasts of this nature, since methodologies can be developed to support foregone conclusions, like lower emission levels in a future year. For this reason, EPA uses the Integrated Planning Model to develop its power sector emissions projections.

IPM is a detailed, sophisticated, and comprehensive electric power sector model that is used to derive all manner of projections for the power sector and is used to

develop the power sector emissions projections that are used in air quality modeling. The model accurately reflects the power sector and contains millions of variables to best ascertain how specific facilities will produce electricity to meet demand in the most cost-effective manner possible. The variables are based upon the best available data, both current and anticipated, and include permitted emission rates for units, unit efficiency, cost data, and operational constraints. This model has been used to support the development of Title IV of the Clean Air Act (the Acid Rain Program), the NOx SIP Call, the Clean Air Interstate Rule, the Clean Air Mercury Rule, and the Clean Air Visibility Rule. In addition, it is used by the Federal Energy Regulatory Commission, private sector, non-profits, research groups, States, and regional planning organizations for power sector projections. The model has undergone extensive peer-review and scrutiny, and EPA believes it is an appropriate tool for use in developing power sector emission projections and better accounts for the many dynamics that exist in the power sector (<http://www.epa.gov/airmarkets/epa-ipm/index.html>).

MP does not challenge the use of IPM for developing power sector emission projections for certain units, but comments that at other units, a revised methodology should

be used. EPA believes that a holistic approach is necessary and using a modeling tool that reflects the integrated nature of the power sector as accurately as possible is the most rational approach to forecasting emissions for all units comprehensively.

To its credit, MP also points out that emissions from the Taconite Harbor Facility (a facility that was recently converted from an industrial source to an electricity generating source) were not included by EPA in either the power sector emissions data or in other emissions inventory used for CAIR modeling. EPA will include the facility in the next version of the IPM. If the facility had been included in the inventory, emissions in Minnesota would have been higher by almost 2,000 tons of SO₂ and about 1,150 tons NO_x than what EPA projected (according to the commenter). Since EPA did not include this facility, EPA believes that its own projections of emissions in Minnesota underestimate likely future emissions.

MP also stated that it is "noteworthy that there are other reductions that Minnesota Power has not modeled that should warrant consideration by EPA, including those resulting from emission controls provided on Minnesota BART eligible units for the regional haze program." MP Comment p. 6. The Regional Haze program requires Best Available

Retrofit Technology or BART to be installed and operational on sources that the State finds subject to BART within five years after EPA approves a State's regional haze SIP. These SIPs are due in December, 2007. EPA does not believe that States will require the installation or operation of BART controls before 2010. Thus, it is highly unlikely that 2010 emissions would be affected by the BART requirements. In addition, MP does not quantify any reductions it believes will occur due to the application of BART in Minnesota. Thus, MP has not established that there will be additional reductions due to BART that must be taken into account when projecting 2010 emissions for units in MN. It is also important to note that EPA has determined that CAIR achieves greater progress than BART, and may be used by States in the CAIR region as an alternative to BART.

In sum, EPA continues to believe its emission projections have reasonably accounted for emission trends within Minnesota and fully account for emission reductions attributable to the MERP. EPA believes the inputs used for the modeling discussed in the Notice of Reconsideration are reasonable and rational projections of 2010 emissions in

Minnesota.¹² For these reasons, EPA is not making any additional changes to the inputs to the PM_{2.5} modeling for Minnesota, beyond those changes described in the Notice of Reconsideration.

For more detail on EPA's characterization of power sector units in Minnesota and power sector emission inputs to the air quality modeling, please see the Technical Support Document titled "Emissions in Minnesota: Additional Analysis as Part of the CAIR Reconsideration" that is part of the record for this proceeding.

Minnesota Power also raised a new issue in its comments on the Notice of Reconsideration, which is that EPA should use a more recent version of its modeling platform to conduct air quality modeling. MP argues that if EPA had done so, Minnesota would be below the PM_{2.5} significance threshold. EPA's modeling for the entire final CAIR (as well as the revised Minnesota air quality analysis) used the Community Multiscale Air Quality (CMAQ) model 4.3. Minnesota Power, however, advocates use of the post-CAIR CMAQ 4.5. The commenter states that the CMAQ 4.5 includes corrections to a mass stability problem in the version (4.3)

¹² Another power company in the Midwest region, Midwest Generation, supported EPA emissions assessment for Minnesota.

used by EPA.

As noted earlier, EPA stated when granting reconsideration that it was not reopening any issues dealing with the modeling platforms used for the revised Minnesota modeling. We reiterate that position here. EPA used CMAQ 4.3 for all of the air quality analyses conducted for the final CAIR, and provided full notice and opportunity to comment on the appropriateness of the model. See 69 FR 47828 (August 6, 2004)(announcing plan to use CMAQ 4.3 for the final rule); see also 70 FR 25234-36 (summarizing the use of CMAQ 4.3). There was ample opportunity to comment on any issues regarding the adequacy of the model during the rulemaking. Nor is the existence of a new iteration of the model "grounds for ... objection ar[ising] after the period for public comment" (CAA section 307 (d) (7) (B)). Predictive models are of course open to the possibility of updating and so are often adjusted. Such adjustments do not normally occasion new opportunities for comment, particularly after the close of a rulemaking. Indeed, doing so would create a perverse incentive to leave models unadjusted. The ultimate issue is whether the model used in the rulemaking bears a "rational relationship to the characteristics of the data to which it is applied". Appalachian Power v. EPA, 249 F. 3d 1032, 1052 (D.C. Cir.

2001). There has already been full opportunity to comment on this issue.

Accordingly, after careful examination of Minnesota Power's petition, as well as all comments submitted in response to EPA's notice, EPA continues to find that Minnesota emissions contribute significantly to downwind nonattainment of the PM_{2.5} NAAQS. EPA is therefore not amending the rule to remove Minnesota from the CAIR PM_{2.5} region.

D. Inclusion of Florida in the CAIR Region for Ozone

Several petitioners sought reconsideration of EPA's determination to include Florida within the CAIR ozone region. Although there were substantial arguments that EPA had already provided adequate notice on this issue (see 70 FR at 72280; several commenters also indicated that this issue had already been noticed), EPA decided to grant the petition.

EPA included Florida within the CAIR ozone region because emissions passed all of the contribution metrics EPA uses to evaluate significance of contribution for ozone, and because highly cost effective controls are available to control NO_x emissions from the state. Specifically, Florida contributes significantly to nonattainment of the 8-hour ozone NAAQS in Fulton County, Georgia (which includes

Atlanta). See 70 FR at 25249 (Table VI-9).

Many commenters agreed with EPA's analysis. The petitioners and other commenters argued that Florida should not be included within the CAIR ozone region at all, or that at most, only the northern portion of the State should be included. Although the reconsideration petitions originally challenged EPA's factual basis for including Florida within the CAIR ozone region, the petitioners were able to duplicate EPA's modeling results relating to magnitude of contribution, frequency of contribution, and relative amount of contribution (the three factors EPA evaluated in determining whether an upwind State's contribution to a downwind State could be considered significant), and therefore are not pursuing this claim. "Assessment of the Contribution of Florida Emissions to Ozone Nonattainment Under EPA's Clean Air Interstate Rule" (Morris, Tai, Tesche, and McNally) (October, 2005) ("Ozone Report") at pp. 4-6 to 4-7; see also Supplemental Brief of Florida Power and Light in North Carolina v. EPA (D.C. Cir. No. 05-1244) at p. 9; Supplemental Brief of Florida Electric Utilities in the same case at pp. 5-6. Rather, the commenters are now challenging how to interpret the relative amount of contribution factor, which is one of the initial screening factors used by EPA to assess if it is appropriate to further analyze the

significance of a State's contribution to downwind ozone nonattainment areas.

In assessing relative amount of contribution, EPA stated that the amount would not be considered to contribute significantly if it was "less than one percent of total nonattainment in the downwind area". 70 FR at 25191 (at 70 FR 25175 and 70 FR 25246, EPA incorrectly described the metric as "the average contribution is greater than one percent"; the correct formulation is as quoted above).¹³ The average percent contribution of Florida to nonattainment in Fulton County is 0.81%. Document OAR-2003-0053-2214.¹⁴

13 See also CAIR Air Quality Modeling Technical Support Document at 32 ("[t]his initial screening was based on ... a percent of total nonattainment of less than 1 percent").

14 There are three parts to the calculation of the average percent of nonattainment metric. In step 1, the ozone values for each of the exceedance periods in a particular downwind area (here, Fulton Co.) are summed over the three episodes.

In step 2, the total ozone from the previous step that is due to anthropogenic sources is calculated based on the source apportionment results. In step 3, the contributions from a given source region to this downwind area are summed over the exceedance periods. The total contribution calculated in step 3 is then divided by the total nonattainment ozone resulting from manmade sources in step 2 to determine the fraction of ozone that is due to emissions from the upwind source area. The fractional value is multiplied by 100 to express the metric in terms of percent.

The values in steps 1 and 2 are reported to the nearest integer. The value in step 3 is reported with one digit to the right of the decimal place. The final average percent of nonattainment value is reported to the nearest integer.

Applied to Florida NO_x emissions to Fulton County, this methodology yields the following:

Commenters argued that because 0.81% is less than one percent, the relative amount of contribution is too small and therefore should not create a significant contribution linkage.

For all relative amount of contribution calculations (not just those involving Florida and Fulton County), EPA rounded the average percent of contribution figure up or down to the nearest integer value, so that values 0.5% and higher were rounded up to one percent, and values less than 0.5% were rounded down to zero.¹⁵ EPA agrees with the

Step 1: Over the three episodes modeled, there was 120,511 ppb of ozone greater than or equal to 85.0 ppb (the level of the 8-hour NAAQS) in Fulton County.

Step 2: From source apportionment modeling, 96,067 ppb of the ozone in Fulton Co. was determined to be of anthropogenic origin.

Step 3: 781.0 ppb of the 8-hour ozone greater than or equal to 85.0 ppb was determined via the source apportionment approach to be from emissions in Florida. Thus the average percent nonattainment is 0.81 percent. This value was rounded to 1 percent.

See generally the spreadsheet found in Document OAR-2003-0053-2214.

¹⁵ These commenters also correctly identified a small discrepancy in the final rule's technical analysis for assessing significance of upwind states' contribution to downwind states' ozone nonattainment. However, as we now explain, this discrepancy does not affect the ultimate conclusions as to which States should be included in the CAIR ozone control region. Values of the average percent

petitioners (and other commenters) that it would have been preferable if EPA had stated this rounding protocol explicitly. 16 That being said, however, it is commonplace to round fractions up or down to the nearest integer.

contribution metric that were less than 1% after rounding to the nearest integer were determined not to be significant and were dropped from further evaluation. For the final CAIR modeling, values of this metric were calculated to one place to the right of the decimal, after rounding. In a later step of the process, EPA then rounded these data to the nearest integer. The net effect was an inappropriate "double rounding" for values that were between 0.450 and 0.499 percent. EPA has recalculated the values for the average percent contribution metric without the inappropriate double rounding. Twenty upwind State-to-downwind nonattainment area linkages had average percent contribution values between 0.450 and 0.499 percent that were erroneously rounded to 1% (rather than 0%). Of these twenty linkages, 19 did not pass other screening criteria, so the linkages were correctly categorized as not significant despite the "double rounding" in the calculation of the average percent contribution metric. The remaining linkage (Mississippi's contribution to Fulton Co., GA) did pass the other screening tests, but was subsequently determined in the post-screening aggregate determination of significance not to be significant based on EPA's evaluation of all of the contribution metrics. EPA has corrected the ozone contribution metrics tables in Appendix G of the CAIR Air Quality Modeling Technical Support Document.

16 Nor is this the only instance of where EPA used the rounding protocol in applying the average percent of contribution metric. In total, nine of the 226 significant linkages in the entire CAIR ozone region using this metric had average percent contributions greater than or equal to 0.5 and less than 1.0 percent. Two of these nine linkages, involving Massachusetts' average percent contribution, were between 0.5 and 1.0 percent and, like Florida's, were rounded up to 1 percent. See Revised Appendix G to Air Quality Modeling TSD.

These same commenters argued that due to the rounding convention, EPA's screening criteria was really .5% rather than one per cent and that this is too low a level to be considered significant. This comment appears to misapprehend critical aspects of EPA's significance determination process. As described on pp. 32-35 of the CAIR Air Quality Modeling Technical Support Document, this process contains four steps: 1) evaluation of contributions against screening criteria, 2) evaluation of contributions from zero out modeling, 3) evaluation of contributions from source apportionment modeling, and 4) a final aggregate determination of significance. The average percent contribution metric is an initial screening step (a step to screen out contributions that are "clearly small", see id. at 32), which does not by itself identify a contribution as significant but rather determines whether further analysis of significance is justified. It is customary and appropriate for such initial screening steps to be conservative, that is, to cast a wider net, with further winnowing to occur in the subsequent steps when more detailed analysis is applied. EPA views the average percent of contribution screening level of one percent, with customary rounding, as reasonable to serve this screening function. This is confirmed by the further analysis applied

to assess Florida contributions to nonattainment of the 8-hour NAAQS in Fulton County. In the case of the Florida contribution, steps 2 and 3 of the determination process indicated that there are large and frequent contributions from that State to elevated ozone concentrations in Fulton Co. EPA's CAIR modeling estimates that Florida can contribute as much as 3 - 5 ppb, depending on the modeling technique, toward modeled eight hour ozone exceedance periods in Fulton Co. Further, it was determined that between 10 - 13 percent of the modeled periods above 85 ppb in Fulton Co. were affected by at least 2 ppb of ozone that resulted from emissions from Florida.¹⁷ This means that emissions from Florida can cause as much as 6 percent (5 ppb/85 ppb) of the ozone in Fulton County during an exceedance period, and these emissions contribute at least 2 ppb during 10 per cent or more of Fulton County's exceedance periods, a contribution that reasonably can be regarded as significant. Accordingly, based on the magnitude and frequency, but not the relative amount of contribution, EPA

¹⁷ The criteria used to distinguish which values comprise a significant contribution are set out at p. 40 of the Air Quality Modeling TSD.

determined that Florida's contribution to nonattainment in Fulton County, Georgia is significant.¹⁸

Commenters further argued that EPA was applying the rounding protocol inconsistently because in other instances, which they view as comparable, EPA truncates fractional digits (i.e. simply eliminates them), rather than rounds them. The examples given are the ozone magnitude of contribution metric (actual amount of ozone contributed by emissions in the upwind State to nonattainment in the downwind area), and the annual average PM 2.5 contribution threshold.

EPA does truncate when applying each of these metrics.

The ozone magnitude of contribution metric quantifies a maximum impact (in parts per billion) on predicted exceedances for a downwind nonattainment area. The exceedance level - i.e. the level of the standard -- for the 8-hour ozone NAAQS is 85 parts per billion ('ppb') which is obtained by "report[ing] parts per million values to the third decimal place, with additional digits to the right

¹⁸ As explained on p. 33 of the Air Quality Modeling TSD, for linkages in which the three contribution factors were not unanimous, we required that two of the three factors had to indicate high magnitude, frequent, and/or relatively large contributions in order to find that the linkage was significant. EPA applied this approach consistently to each of the linkages for which it made a significance determination.

being truncated". 40 CFR Part 50 App. I ("Interpretation of the 8-Hour Primary and Secondary National Ambient Air Quality Standard for Ozone") at 2.1.1. The truncation protocol used in the magnitude of contribution metric is thus directly related to the form of the NAAQS itself. Because the magnitude of contribution metric is tied directly to the 8-hour NAAQS exceedance level, EPA uses the identical truncation protocol as is used in the NAAQS. In contrast, the average percent of nonattainment metric is not directly related to the form of the 8-hour ozone NAAQS (indeed, it is not related at all). As stated earlier, and illustrated in note 14 above, the metric assesses overall impacts which are expressed by aggregating all the impacts of a State on a downwind receptor divided by the total impacts from all anthropogenic emissions. Since there is no direct comparison with the ozone NAAQS, there is no reason to utilize the conventions used in expressing that NAAQS.

The comments also maintain that EPA used a different protocol to evaluate when an upwind State's contribution to downwind nonattainment of the PM 2.5 NAAQS is significant. EPA's metric for determining significant contribution to PM 2.5 NAAQS nonattainment is 1 % of the standard, or .15 ug/m³ which EPA rounds up to 0.2 ug/m³. 70 FR at 25191. EPA took this step to avoid expressing the contribution metric using

a greater level of precision (i.e. a greater number of digits) than is used in the NAAQS itself. Id. Since the PM_{2.5} contribution metric is expressed as a direct percentage of the NAAQS itself, it is appropriate that it conform to the form of the NAAQS. The percent of nonattainment metric at issue here, as explained above, is not directly related to the form of the 8-hour ozone NAAQS, so there is no reason to adopt the conventions which are part of that form. For the same reason, there is no inconsistency in EPA's approach in choosing for purposes of PM contribution expressed in terms of a percent of the PM_{2.5} NAAQS to use the conventions used in the form of that NAAQS.

The comments go on to say that even if it is reasonable to include Florida within the CAIR ozone region, only a portion of the state (the northern portion as delineated in the comments) should be included rather than the entire state.

The commenters have the burden of demonstrating that EPA's approach of assessing significant contribution based on the collective emissions from the entire state lacks rationality. Appalachian Power v. EPA, 249 F. 3d 1032, 1050 (D.C. Cir. 2001); see also State of Michigan v. EPA, 213 F. 3d 663, 683-84 (D.C. Cir. 2000) (burden is on the party

seeking to exclude a portion of a State to demonstrate that the portion is "innocent of material contribution"). As EPA explained in responding to these same commenters' motions for a stay of the rule in the D.C. Circuit (which response is part of the administrative record for this proceeding), not only have the commenters failed to carry their burden, but their modeling confirms that Florida represents a classic instance of collective contribution to downwind nonattainment. The commenters' report shows that both the (posited) northern and southern regions contribute substantial portions of the total ozone loading from Florida to Fulton County, namely 69 per cent from the northern region and 31 per cent from the southern region. Ozone Report at 5-3. Nor does there appear to be any basis for the north-south divisions put forward in the comments. Not only does the report underlying the comments itself concede that there are a multitude of potential divisions (the Report suggests six ozone subregions in various permutations, and the Report further states that "clearly numerous other ones could be also be constructed" (Ozone Report at 5-1)), but that the ones put forward were done so essentially to show that the (posited) northern portion met significance criteria but the (posited) southern portion(s) does not. Ozone Report at 3-2. Accordingly, EPA does not

agree with the commenters' arguments that contribution must be assessed on a different basis than EPA used in the rule.

E. Impact on CAIR Analyses of D.C. Circuit Decision in New York v. EPA

As described in the December 29, 2005 CAIR Supplemental Notice of Reconsideration, "Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule): Supplemental Notice of Reconsideration" (70 FR 77101-13), EPA decided to grant Petitioner's request that EPA reconsider the impact of New York v. EPA, 413 F.3d 3 (D.C. Cir. 2005) on certain analyses prepared for the final CAIR. One petitioner claimed that this June 2005 opinion of the D.C. Circuit raised questions about the sufficiency of certain analyses prepared for the CAIR. Among other things, the opinion vacated a provision of the New Source Review (NSR) regulations, commonly known as the pollution control project (PCP) exclusion. The CAIR Supplemental Notice of Reconsideration explained that EPA reviewed the petition for reconsideration and analyzed the potential impact of New York v. EPA on CAIR analyses regarding cost-effectiveness and timing. This analysis indicated that, as a result of the New York v. EPA decision,

some electric generating units (EGUs) that install SO₂ and/or NO_x controls for CAIR may incur relatively minor additional costs and a few such units may be subject to additional permitting requirements, but that these potential impacts will neither affect the highly cost-effective determination that the Agency made in CAIR nor impact the timeframe for CAIR reductions.

The CAIR Supplemental Notice of Reconsideration presented this and concluded that the potential impacts of the D.C. Circuit Decision in New York v. EPA do not alter the final highly cost-effective determination made in the final CAIR and do not affect the feasibility of implementing the CAIR reductions in the required timeframe. Thus, the CAIR Supplemental Notice of Reconsideration did not propose any modifications to the final CAIR.

Today's action finalizes EPA's determination that no modifications to the final CAIR are needed to address this issue and responds to public comments received on the CAIR Supplemental Notice of Reconsideration.

1. Background on the Impact on CAIR Analyses of D.C. Circuit Decision in New York v. EPA

For background information on this issue, please refer to the CAIR Supplemental Notice of Reconsideration (70 FR 77103-13).

2. Additional Analysis on the Impact on CAIR Analyses of D.C. Circuit Decision in New York v. EPA Presented in the CAIR Supplemental Notice of Reconsideration

The CAIR Supplemental Notice of Reconsideration presented analysis that EPA conducted to evaluate the potential impact on CAIR Analyses of the D.C. Circuit Decision in New York v. EPA. The analysis first examined the potential cost and timing impacts of the decision, assuming units would take measures to mitigate any potential significant collateral increases in emissions of NSR-regulated pollutants. Then, the analysis examined the potential impact of NSR permitting on the CAIR cost-effectiveness and timing analyses.

First, the analysis looked at the potential costs and timing implications of measures that could be taken to mitigate collateral emission increases and thus avoid NSR permitting. As part of the analysis, EPA made several assumptions it believes to be generally very conservative. However, the analysis still showed that the potential impacts would neither affect the highly cost-effective determination that the Agency made in the CAIR nor impact the timeframe for CAIR reductions. (See 70 FR 77105-9).

Second, the analysis examined the potential impact of NSR permitting. It showed that, although sources installing

controls for CAIR generally will have options to avoid triggering NSR for collateral increases, some sources may conduct projects that could result in a net emissions increase despite possible mitigation measures. These sources might therefore apply for and obtain the necessary NSR permits to address such increase. EPA's analysis showed, however, that the impact of permitting of such sources on EPA's CAIR analyses is minimal. The Agency believes that the impacts of choosing to undertake NSR for these units are not substantial enough to affect the CAIR highly cost-effective determination or the feasibility and timing analysis. (See 70 FR 77109-11).

Overall, the analysis presented in the CAIR Supplemental Notice of Reconsideration showed that the decision to vacate the PCP exclusion under NSR does not require any modification of the final CAIR. The Notice thus did not propose any changes to the CAIR.

3. Public Comment on the CAIR Supplemental Notice of Reconsideration

EPA received several comments on the Supplemental Notice of Reconsideration.¹⁹ Most of the commenters supported the conclusions in EPA's analysis regarding the

¹⁹ These documents are available in the docket for the CAIR (EPA-OAR-2003-0053).

impact of the New York v. EPA decision on both the cost-effectiveness analysis and timing analysis prepared for CAIR. Some commenters, however, did disagree with some aspects of the analysis that EPA performed in coming to its conclusion.

One commenter, who generally agreed with EPA's conclusion that the potential impacts of D.C. Circuit Decision in New York v. EPA do not alter the final highly cost-effective determination made in the final CAIR and do not affect the feasibility of implementing the CAIR reductions in the required timeframe, disagreed with several points in the supporting analysis. First, the commenter does not believe that the emissions increases associated with coal switching identified in two categories of controls in EPA's analysis would be considered in calculating collateral emission increases. While EPA agrees that in most cases coal switching would not be included in calculating collateral emission increases for a PCP, this inclusion/exclusion is dependent upon the specific permit of the affected source. In its analysis, EPA made the conservative assumption that coal switching would be included in calculating collateral emission increases for PCPs involving SCR and/or FGD retrofits.

In its cost-effectiveness analysis, EPA also made the

conservative assumptions that all EGUs that will install SCR and/or wet FGD will experience a significant emissions increase in sulfuric acid mist and that all of those EGUs will install a wet ESP to mitigate those emissions. The commenter believes these assumptions are unrealistic. The Agency agrees that these assumptions lead to an overestimate of the cost impact of the decision in New York v. EPA, since the number of EGUs with collateral increases in sulfuric acid mist will be much smaller than the universe assumed in EPA's analysis and that the BACT determinations in those cases with significant increases in sulfuric acid mist may not involve the installation of wet ESP due to its high cost. As mentioned in the CAIR Supplemental Notice of Reconsideration, historically, BACT for sulfuric acid mist at combustion sources generally has been switching to lower sulfur coal or installation of wet FGD.

The commenter argued that EPA improperly assumed that condensable emissions are regulated as a component of PM, and suggested that EPA's analysis was flawed in this respect. It should also be noted that EPA is not taking action to change the manner in which EPA treats condensable emissions. Further, the status of condensable emissions as a regulated NSR pollutant does not change the outcome of the Agency analysis discussed here. This analysis, which

assumed that sulfuric acid mist would be regulated as a component of particulates, concludes that the New York v. EPA decision will not change the conclusions of the cost-effectiveness and timing analyses prepared for CAIR.²⁰ If EPA were to assume, as the commenter suggests, that these emissions are not regulated as NSR pollutants, the conclusion of EPA's analysis would only be strengthened.²¹

The same commenter also suggested that for some large EGUs burning high sulfur coal and installing wet FGD, sulfuric acid mist emissions may exceed the NSR threshold. While this may be true in some cases, EPA does not feel that this will undermine the conclusions of the analysis in the CAIR Supplemental Notice of Reconsideration because of the very conservative assumptions made throughout the analysis (For purposes of its cost analysis, EPA assumed that these units installed wet ESP). It is difficult to estimate the

²⁰ The commenter challenges these conclusions and says they only hold true if condensables are not regulated. However, the commenter offers no analysis to support this assertion or to identify any errors in EPA's analysis to support this argument.

²¹ The commenter further notes that it would disagree with the conclusions in EPA's analysis if it assumes condensables are regulated; however, it does not provide any analysis to demonstrate that EPA's conclusions are flawed. As explained above and in the Supplemental Notice of Reconsideration, EPA's analysis shows that, even when very conservative assumptions are made, the court decision does not alter the conclusions of the analyses supporting the CAIR.

number of such units without permit information for all units at which this may occur. Further, as mentioned in the CAIR Supplemental Notice of Reconsideration, much of the SO₃ produced by SCR does not reach the stack; SCR conditions favor a reaction between SO₃ and ammonia that produces ammonia bisulfate, which condenses to form solid PM, the majority of which will be captured in the unit's particulate control device. Thus, EPA does not feel that many such units will reach the NSR threshold for sulfuric acid mist.

Another commenter disagreed with EPA's assessment of potential collateral increases in CO from low NO_x burners (LNB). While EPA believes that installing combustion control systems can lead to collateral increases in CO, triggering NSR, *generally* LNB will not significantly affect the combustion process and production of CO. It is the Agency's position that increases in CO can be minimized through adjustments of combustion control systems (*e.g.*, good combustion practices), and at this time there are no other cost-effective control options for reducing CO. Therefore, even in cases where NSR is triggered, no significant additional control costs would be incurred.

A third commenter asserts that "based upon EPA's discussion in the Reconsideration Decision, [the commenter] understands that only those analyses performed by EPA and

described in the Reconsideration Decision are needed to assess whether a PCP undertaken for CAIR compliance would increase emissions of any NSR regulated pollutant in an amount that exceeds the applicable NSR significance level. If there are other methods or means by which EPA believes a PCP performed for CAIR compliance would trigger NSR, or if, using EPA emission increase methodologies, EPA believes or would find that other air pollutant emissions would increase above an applicable NSR significance level as a result of PCPs that are expected to be performed for CAIR compliance, then the Reconsideration Decision is deficient."

The analysis presented in the CAIR Supplemental Notice of Reconsideration addresses only those general categories of projects that would have qualified as PCPs under the NSR rules vacated by the court and that we believe have the potential to increase collateral emissions of NSR regulated pollutants enough to trigger NSR. It is not our intent, nor is it within the scope of our analysis, to consider at this time what permitting requirements might apply to all categories of pollution control activities (including those that were not listed as a PCP under the NSR rules) that might be undertaken by EGUs attempting to comply with the CAIR requirements. The analysis was conducted to determine whether the elimination of the PCP exemption would impact

the cost-effectiveness and timing analyses for the CAIR. Potential permitting requirements for categories of activities that would not have been subject to that exemption are not relevant to that analysis.²²

On all other major points, commenters agreed with EPA's analysis, and half of the commenters also explicitly agreed with EPA's conclusion that impacts of D.C. Circuit Decision in New York v. EPA do not alter the final highly cost-effective determination made in the final CAIR and do not affect the feasibility of implementing the CAIR reductions in the required timeframe. It should also be noted that other than the four commenters, no other affected parties offered problems associated with the impacts of D.C. Circuit Decision in New York v. EPA that might undermine the final CAIR cost-effective determination and timing of compliance dates.

Today's action does not modify the final CAIR. In the CAIR Supplemental Notice of Reconsideration, EPA announced

²² The analysis addresses all relevant categories of PCPs of which EPA is currently aware. The commenter failed to identify any concrete problems that they were concerned about facing or other relevant categories of PCPs. Moreover, in addressing the relevant general categories of PCPs, EPA does not purport to make determinations about whether NSR would be triggered in any specific PCPs undertaken to comply with the CAIR, EPA will consider, and make determinations based on, the specific circumstances of those projects.

that it would reconsider the impact of the New York v. EPA decision on cost-effectiveness and timing analyses prepared for the CAIR. The EPA analyzed the potential impact of the decision and solicited, considered and responded to public comment on that analysis. The EPA's analysis shows that the D.C. Circuit Decision in New York v. EPA does not significantly impact either the CAIR cost-effectiveness determination or the compliance dates. For that reason, EPA has determined that modifications to the final CAIR are not warranted. The Agency believes that installation of emission controls for CAIR, as well as other programs, is extremely beneficial and is working on ways to minimize permitting issues associated with installation of these devices in a way that is consistent with the D.C. Circuit Decision in New York v. EPA.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule

that may:

(1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, OMB has determined that this is a significant regulatory action in view of its important policy implications. As a result, this action was submitted to OMB for review. However, this action does not promulgate any modifications to the CAIR. Therefore a regulatory impact analysis was not prepared.

B. Paperwork Reduction Act

This action does not promulgate information collection request requirements under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Therefore, an

information collection request document is not required.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule.

For purposes of assessing the impacts of today's notice on small entities, small entity is defined as: (1) a small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards. (See 13 CFR part 121.); (2) a governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's notice on small entities, I have concluded that this action will not have a significant economic impact on a substantial number of small entities. This notice does not impose any requirements on small entities. This notice does not promulgate any modifications to the CAIR.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory

actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and Tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, UMRA section 205 generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least-burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least-costly, most cost-effective, or least-burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed, under section 203 of the UMRA, a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small

governments to have meaningful and timely input in the development of EPA's regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that today's notice does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any 1 year. Today's notice does not add new requirements that would increase the cost of the CAIR. Thus, today's notice is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that today's notice does not significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's notice is not subject to section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of

regulatory policies that have federalism implications.”

“Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

This action does not have federalism implications. It would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The CAA establishes the relationship between the Federal Government and the States, and this action would not impact that relationship. Thus, Executive Order 13132 does not apply to this action.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by Tribal officials in the development of regulatory policies that

have Tribal implications."

For the same reasons stated in the final CAIR23, today's notice does not have Tribal implications as defined by Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes, since no Tribe has implemented a federally-enforceable air quality management program under the CAA at this time. Furthermore, this action does not affect the relationship or distribution of power and responsibilities between the Federal government and Indian Tribes. The CAA and the Tribal Air Rule establish the relationship of the Federal government and Tribes in developing plans to attain the NAAQS, and today's notice does nothing to modify that relationship. Because this notice does not have Tribal implications, Executive Order 13175 does not apply.

If one assumes a Tribe is implementing a Tribal implementation plan, the CAIR could have implications for that Tribe, but it would not impose substantial direct costs upon the Tribe, nor would it preempt Tribal Law.

Although Executive Order 13175 does not apply to the CAIR or this notice of final action on reconsideration of the CAIR, EPA consulted with Tribal officials in developing the CAIR.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Executive Order 13045: “Protection of Children From Environmental Health and Safety Risks” (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This notice is not subject to Executive Order 13045 because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children. The EPA believes that the emissions reductions from the CAIR will further improve air quality and children’s health.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

Executive Order 13211 (66 FR 28355, May 22, 2001) provides that agencies shall prepare and submit to the Administrator of the Office of Regulatory Affairs, OMB, a Statement of Energy Effects for certain actions identified as "significant energy actions." Section 4(b) of Executive Order 13211 defines "significant energy actions" as "any action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of final rulemaking, and notices of final rulemaking (1) (i) that is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action." The final CAIR is a significant regulatory action under Executive Order 12866, and EPA concluded that the final CAIR rule may have a significant adverse effect on the supply, distribution, or use of energy. The impacts are detailed in the final CAIR (70 FR 25315). Today's notice is a significant action under Executive Order 12866, but it is not a rulemaking action and does not revise the final CAIR rule in any way. Therefore

this action does not change EPA's previous conclusions regarding the energy impacts of CAIR. EPA's analysis of these impacts is explained in the preamble to the CAIR (70 FR 25315-16) and in the Regulatory Impact Analysis for the Final CAIR (March 2005).

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer Advancement Act of 1995, Public Law No. 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The National Technology Transfer Advancement Act of 1995 directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

Today's notice does not involve technical standards. Therefore, the National Technology Transfer and Advancement Act of 1995 does not apply.

J. Executive Order 12898: Federal Actions to Address

Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires Federal agencies to consider the impact of programs, policies, and activities on minority populations and low-income populations. According to EPA guidance,²⁴ agencies are to assess whether minority or low-income populations face risks or a rate of exposure to hazards that are significant and that "appreciably exceed or is likely to appreciably exceed the risk or rate to the general population or to the appropriate comparison group." (EPA, 1998).

In accordance with Executive Order 12898, the Agency has considered whether the CAIR may have disproportionate negative impacts on minority or low income populations. The EPA expects the CAIR to lead to reductions in air pollution and exposures generally. Therefore, EPA concluded that negative impacts to these sub-populations that appreciably exceed similar impacts to the general population are not expected. For the same reasons, EPA is drawing the same

²⁴ U.S. Environmental Protection Agency, 1998. Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA

conclusion for today's notice to reconsider certain aspects of the CAIR.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this notice and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the notice in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804.

L. Judicial Review

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit if (i) the agency

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action consists of "nationally applicable regulations promulgated, or final action taken, by the Administrator," or (ii) such action is locally or regionally applicable, if "such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

Final actions described in this Notice of Final Action on Reconsideration are "nationally applicable" within the meaning of section 307(b)(1). This Notice explains the final actions EPA is taking on the petitions for reconsideration of the CAIR. It describes EPA's final action on the six issues for which EPA previously granted reconsideration, and provides notice of EPA's decision to deny reconsideration of several additional issues. EPA has determined that all of these actions are of nationwide scope and effect for purposes of section 307(d)(1) because the actions directly affect the CAIR, which previously was found to be of nationwide scope and effect. Thus, any petitions for review of the final described in this Notice must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date this Notice is published in the Federal Register.

List of Subjects

40 CFR Part 51

Administrative practice and procedure, Air pollution control, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Regional haze, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 96

Administrative practice and procedure, Air pollution control, Electric utilities, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

Dated:

Stephen L. Johnson,

Administrator.